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ORIGINAL DEPARTMENT.

LECTURE.

CONCUSSION OF THE BRAIN.

Delivered before the Paris Faculty of Medicine,

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GENTLEMEN—The further we advance in the study of cerebral lesions, the more difficult our task becomes, and the more interesting the subject.

We have studied together the wounds of the scalp, and the traumatic lesions of the subjacent cranium; we have been fully satisfied, too, in concluding these researches, that we have established clearly the intimate relations existing between these lesions and the symptoms observed.

We are to consider, to-day, a more delicate subject, those traumatisms which have a direct influence on the brain itself; for, besides the direct wounds with which we are already conversant, the brain may be affected in various ways by traumatic lesions; in a word, there may be concussion, or contusion, or compression of the brain.

The older surgeons were but little conversant with the lesions of this organ of which I am about to speak.

The first attempt at a symptomatic description of cerebral concussion was made by Boirel, in 1677, who tried to separate it from the other lesions of the organ. This distinction reappeared in the works of Sabourand and J. L. Petit, and was definitely accepted by the old Académie de Chirurgie. Later, Boyer, and particularly, Dupuytren, established, in connection with concussion and compression, the symptomatology of contusion of the brain.

But, if this division of cerebral lesions, established by men eminent for clinical observation, appeared to respond to as many clearly separated morbid conditions, the symptoms were not fixed, nor the lesions clearly defined, and this part of surgical pathology, together with its pathological physiology remained exceedingly obscure.

It is only within the past few years, through the remarkable advance in our knowledge of the pathological physiology of the nervous centres, due to well-directed observation and experimentation, that it has been possible to define anatomically and characterize by symptoms peculiar to each, the different traumatisms of the brain. Among the more important modern works must be cited that of M. Duret, prosector to this Faculty.

CONCUSSION OF THE BRAIN.

Concussion of the brain is characterized by a special collection of symptoms, consisting in an alteration, more or less marked, of intelligence, sensibility and movement, which supervenes immediately after the injury, and presents this peculiarity, that if death does not immediately ensue, all the morbid symptoms gradually disappear. For a long period it was generally admitted that this set of symptoms had no connection with any appreciable lesion, and resulted simply from the shock sustained by the encephalic mass; but these hypotheses of transmitted oscillations and vibrations are at present almost abandoned, and we will see, as we progress in our study, that modern works tend to explain differently the phenomena of concussion. Perhaps, then, it will be possible to complete this purely symptomatic definition of concussion.

Concussion is said to be direct when the injury affects the cranium itself; indirect when it supervenes after a fall on the feet, the knees, the pelvis, or the face.

The symptoms attributed to concussion are multiple and complex, and have been divided into three classes, somewhat arbitrarily separated, and based on the gravity, more or less marked, of the functional derangement. In the first degree, or slight concussion, following a blow or fall, the patient is giddy and confused; there is ringing in the ears; vision is disturbed; the face suddenly becomes pale; respiration is one moment arrested, and the individual becomes faint and weak. Then, after a very short time, a few seconds, or a few minutes, rarely more than a quarter of an hour, the patient comes to himself and has but a very vague recollection of the accident: there remains, however, some dullness of comprehension, and a sensation of great fatigue, which may last but for a short time, or for several hours.

The gravest degree of concussion follows a more violent traumatism, and is characterized by the following symptoms; the patient falls insensible and motionless; he remains in a state of coma; pulse and respiration are hardly perceptible; the evacuations are involuntary, and death supervenes promptly, by a sort of gradual extinction of the action of the heart and lungs.

Between these two extreme degrees there is one intermediary, called grave concussion, of which the symptoms differ widely, according to the intensity of the traumatism: loss of consciousness, more or less complete abolition of general and special sensibility, complete muscular relaxation, dilatation of the pupils, involuntary evacuations, while the face is pale, pulse very small and slow, respirations few and far between. In some cases there have been but twenty pulsations per minute.

After a few hours or a few days the morbid symptoms become less intense, but the return to the normal condition is gradual and very slow. Generally the intellectual faculties are reëstablished more slowly than the motor and sensory functions; this is an important point to bear in mind. The patient remains for some time confused, the memory particularly being defective.

I have passed very rapidly, gentlemen, over the symptomatology of concussion, which you will find well and completely considered in your works on external pathology, as I wish to arrive at the less known and more interesting part of the subject.

ANATOMY AND PHYSIOLOGICAL PATHOLOGY OF CONCUSSION.

To what anatomical condition does this set of symptoms correspond? This question has long remained unanswered. As the autopsies of patients who succumbed in this state revealed no lesions to Litré, Sabatier, Boyer, or Meunier, it was considered that cerebral concussion consisted in the shock sustained by the brain in all its parts, without any appreciable lesion except the close packing together (*tassement*) of the nerve fibres.

Gama even sought to prove the correctness of this doctrine by experimentation; he poured isinglass into a thin globe of glass, and then by percussion obtained oscillations of the diffuent mass, which he compared with the oscillations of the brain in concussion. As if the brain, incompressible and adherent at certain parts, divided into hemispheres and lobes separated by tense networks of fibrous tissue, presented any analogy with a diffuent mass of isinglass.

Then other authors, with Deville and Prescott Hewett, brought forward cases in which lesions were found at the autopsy, a rachidian hemorrhage in Deville's case. Somewhat later, Fano, having instituted experiments, which consisted in suddenly killing dogs by a blow on the head, and having always found hemorrhagic effusion at the base of the cranium, concluded that concussion does not take place, and that the symptoms ordinarily ascribed to it are due not to concussion, but to a contusion of the brain, or to hemorrhagic effusions situated principally at the base, and inducing compression of the bulb.

In fact, all these suppositions were far from conclusive, and opinions on the subject were extremely vague. Our ignorance regarding the nature of concussion was almost complete. This was the state of affairs when I composed my treatise on surgery; nevertheless, as clinical observation compelled me to admit the existence of concussion as an affection proper to the brain, I was opposed to its exclusion from the list of diseases of this organ. I also expressed the opinion that research should be directed toward the bulb, to find the material lesion of concussion. I considered also, that a shock might determine "a sudden and more or less persistent ischæmia of the whole or a part of the brain, of a nature to induce the symptoms observed."

These were simple deductions from clinical observation. Since that epoch experimentation and observation have proven the reality of this opinion. In a series of experiments made under the most satisfactory scientific conditions, M.

Duret has permitted us to respond to this debated question, explaining the mechanism of concussion, and creating and demonstrating in a general way the pathological physiology of cerebral traumatism.

Seeking the causes and mechanism of cerebral concussion induced by sudden injections into the interior of the cranium, M. Duret succeeded in reproducing the clinical forms of concussion. Considering that the slowing up of the respiration and pulse, and the abolition of intellectual phenomena, are the most marked symptoms, and reflecting, on the other hand, that, according to the most recent physiological researches, the bulb is the centre of cardiac and pulmonary life, that it contains the fibres which place the intellectual centres in relation with exterior objects, M. Duret was led to seek for the lesions of concussion in this portion of the encephalon.

In order to exaggerate the shock on the cerebral hemispheres, and, consequently, the lesions it determines, he injected suddenly, through a small aperture, into the cranium of a vigorous dog, three ounces of liquid. The dog was killed immediately afterward, and at the autopsy was found an enormous dilatation of the aqueduct of Sylvius and of the central canal of the medulla, and besides this, the floor of the fourth ventricle had been torn (*éclatement*). On careful examination of this tear, M. Duret remarked that the parietes were turned outward, as if the tear was produced by a force acting from within outwardly, that is, from the interior of the ventricle toward the exterior; and he thence concluded that, through the considerable pressure suddenly brought about on the surface of the cerebral hemispheres, the cerebro-spinal fluid contained in the lateral ventricles had been suddenly expelled through the aqueduct of Sylvius, which was dilated and torn, into the fourth ventricle, which being thus over distended and presenting but a small external orifice, was suddenly split.

In order to prove that this lesion was really due to the cerebro-spinal liquid driven back by the experimental traumatism, and to prevent the objection that the lesion was produced by the injected liquid, M. Duret repeated the same experiment with a colored liquid susceptible of coagulation; "the same lesions were reproduced."

But it is yet necessary to demonstrate that this sudden driving back of the cerebro-spinal fluid, produced by the injection of a coagulable liquid on the surface of a hemisphere, exists really in traumatism which affect the cranium.

The experiments of Brün and Felizet have

abundantly proven that the cranium is in a great measure depressible and elastic; that there is produced a "cone of depression" at a percussed point, while at the opposite extremity of the axis of percussion there is produced a "cone of elevation" (*soulevement*)."

We can, then, no longer deny the displacement and exaggerated tension of the cerebro-spinal fluid, since the blows and falls on the cranium flatten at one point the osseous envelop of the encephalon, which is itself incompressible. As we know, on the other hand, that the cerebro-spinal liquid has its source in the very fine membranes which surround the smaller arterioles of the brain substance, and that from thence it is spread over the periphery of the encephalon in the sub-arachnoid space, penetrating into the ventricles by the great fissure of the cerebrum, and descending thence toward the fourth ventricle and the central canal of the medulla by the aqueduct of Sylvius; since, as I say, these anatomical facts are known to us, it would seem natural to admit that the first effect of any augmentation of tension in this liquid would be to force it back toward its points of origin, and on the other hand toward the natural outlets. M. Duret has characterized this phenomena by an appropriate term, the cerebro-spinal shock (*choc céphalo-rachidien*).

If this shock has been of medium intensity, as happens in a certain number of clinical observations, the lesions will consist in a simple augmentation in the tension of the cerebro-spinal liquid and a momentary compression of the vessels of the brain substance. But if the shock is more violent, the liquid is of a sudden forced back into the lymphatic sheaths (*gaines*) and causes rupture of the smaller capillaries. These lesions of concussion are first evident at the part where the shock is most direct, at the "cone of depression," after that at the opposite extremity of the axis of percussion at the "cone of elevation," and at certain other parts of the surface of the brain. Again, as the shock is communicated to the entire mass of the cerebro-spinal liquid, it suddenly distends the sub-arachnoid space and its diverticuli, and the vessels there contained are ruptured. No matter where the shock commences, if it be violent, the liquid is driven back in the cavities of the ventricles in a certain manner; from the lateral ventricles it passes into the middle, and thence by the aqueduct of Sylvius into the fourth ventricle, which it distends and bursts open; this is why, in such cases, hemorrhagic effusions are found at the surface and in the substance of the bulb.

Since, then, the clinical symptoms of concussion are in exact correspondence with the lesions observed, there would seem to exist no possible objection to this doctrine of the mechanism of cerebral concussion.

There exists in the symptomatology of concussion a symptom rarely observed in practice, and which is never wanting when this condition is produced experimentally; it is a species of generalized tetanism of the voluntary and involuntary muscles, and particularly of those of the vascular system. This generalized contracture is evidently of reflex origin, and we have already demonstrated that the shock on the cranium is transmitted principally to the bulb, and to the entire encephalon; you have even been able to see the lesions of this organ.

You are also aware that there exists one part of the bulb, the restiform bodies, the irritation of which gives rise to tetanic effects not observed in other parts of the bulb. We can, then, safely conclude that this generalized tetanism is due to irritation of the restiform bodies.

This spasm, which affects particularly the muscles of the vascular system at the moment of the shock and for a few minutes afterward, is demonstrated by the elevation in arterial tension, which is most marked when the shock is violent (experiments of Duret and Franck). Duret has shown this specially for the vessels of the brain, by measuring the tension of the blood in the jugulars; at the moment of the shock it suddenly falls. If a final proof is wanting of this sudden cerebral anemia, I would say that the movements of the brain, which are the result of arterial expansion, of the dilatation of the intracerebral vessels (Bech, Franck, Mosso, Salathé) are suddenly arrested at the moment of the shock (Duret).

Thus are explained the loss of cerebral functions, intellect, movement, sensibility, the sudden arrest of pulse and respiration, the troubles of calorification, etc.

In the second phase, there is general relaxation and complete resolution; to the spasm has succeeded paralysis of the entire vascular system, particularly of the cerebral vessels.

It is a law of general pathology, that any irritative lesion of the tissues determines first spasm and then paralysis. The flow of blood in the dilated capillary vessels about the nerve elements becomes slower, thence ensues the comatose state, and the dullness of intelligence, motion and sensibility, remarked in clinical observation.

The persistent troubles of intelligence, motion

and sensibility are due to some material destruction of the parts, and are observed when the shock has been of great intensity. I do not wish in this lecture to speak of the third degree of inflammatory reaction, which will be considered when we treat of traumatic meningo-encephalitis.

We have seen, then, gentlemen, that the diverse troubles, variable as regards their intensity and duration, observed in cerebral concussion, can all be explained by the lesions determined by the sudden displacements and consequent changes in pressure in the cerebro-spinal fluid.

These lesions are, 1st, a simple augmentation in tension of the cerebro-spinal fluid, which induces momentary cerebral anemia, or ruptures of the capillaries of the brain and pia mater, or, 2d, ruptures of the brain substance.

Every traumatism affecting the cranium has a more or less serious effect on the bulb, by the intermediary of the cerebro-spinal fluid.

We can now, then, complete the definition of concussion given at the commencement of this lecture. The designation concussion is given to a collection of nervous troubles of very variable duration and intensity, due to the reaction on the cerebral circulation and brain substance, brought about by the modifications in intensity and displacements of the cerebro-spinal fluids.

COMMUNICATIONS.

PHYSICAL ASPECTS OF INFANTILE UNFOLDMENT.

BY THOMAS S. SOZINSKY, M.D., PH.D.,
Of Philadelphia.

The nature of the young, but especially of the very young, is a branch of physiology which deserves much attention, far more, doubtless, than it receives. However this may be, it is certain that without a proper understanding of it, infantile welfare cannot be promoted, nor infantile diseases treated naturally and successfully.

It is extremely probable that many physicians, like people generally, know less than they suppose, about children. The manifold aspects of a child, physical and mental, constitute an extensive and complex branch of study. A child is indeed a difficult subject to fathom. How does it unfold physically? How does it unfold mentally? At what rate should it unfold physically? At what rate should it unfold mentally? What are the conditions suitable for its proper physical unfoldment? What are the conditions suitable for its proper mental unfoldment? How many, or perhaps I should say who, can answer these questions?

To some aspects of the physical unfoldment of infants I invite the attention of the reader in the remarks which succeed. What I shall say will have for a basis items of a record of observations made recently on a male child, during its first year, who was healthy and of about average size at birth, and who was cared for in all respects as hygienically, perhaps, as it is possible for a child to be. Of the observations, I may remark that, altogether, they may be taken as reasonably accurate. They were noted down week after week, as made. The peculiar relation of the observer to the child on whom they were made did not, I feel sure, tend to render them inaccurate.

It is proper to state, to begin with, that the child—an only one—is of healthy parentage, and of Anglo-saxon ancestry, free from constitutional diseases, and on the father's side, at least, extremely long lived; and that his parents are each in the prime of life, and each of about medium size, the mother being somewhat thin and the father somewhat stout. So much by way of pedigree for the child—a matter of great significance.

Now it may seem incredible, but it is nevertheless a fact, that in all the voluminous records of science, medical and otherwise, there is not, so far as I know, a complete record of the increase in weight and height, even from month to month, of a child that was healthy and well developed at birth and cared for hygienically in all respects, from day to day. This is almost equivalent to saying that there is no standard by which parents or the physician can judge of children, whether or not they are growing properly. I am aware that there are some records of features of the unfoldment of children, particularly as met with in institutions; but I believe every one will agree with me, when I say that the record of the unfoldment of such children is not a record of the unfoldment of children under proper conditions. A normal, or typical unfoldment of a child must be sought for elsewhere. If one is taken as a criterion, or standard, it should be one that was sound at the start, and that has been managed hygienically all along.

The efforts which have been made to delineate numerically the physical unfoldment of infants can be easily recounted. M. Bouchut made an approximate estimate of it, which he recorded in 1874, in the *Gazette des Hôpitaux*, No. 78. Dr. Hæhner made a record of the height of a healthy child of his at different periods during the first year, which may be found in the number of the *American Journal of Obstetrics*, for October, 1880. This is the only record of the increase of height,

from time to time, with which I am acquainted, and it is not presented in a very practical shape. Dr. Etienne Evetsky, published in the *New York Medical Journal*, for February, 1881, an elaborate article on the results of an extended series of observations on the increase in weight, from week to week, of a large number of children during their first year, in the New York Infant Asylum. This is a valuable production, but I think that the author would hardly regard his figures as a standard by which to judge of the growth of healthy children hygienically reared. These articles embody all the precise information there is, or rather, that I am acquainted with, in regard to the increase in weight and height from time to time during the first year of life.

The vulgar belief that if a child is weighed or measured it will not live long, may account, in some measure, for the remarkable absence of records of the physical unfoldment of children. It would be well for every one's mind to be disabused of this strange superstition. The only ground for it, that I can imagine, is, that few or no observations of the kind have been made on any but sickly children—the sickliness prompting this attention. It would be wise to weigh all children every week or two, during at least the first year; for in this way only can it be determined precisely whether they are thriving evenly and sufficiently. In the light of such observations, faults in the conditions of existence of children can be discovered, and to some extent the presence of disease detected. For when an infant does not increase in weight at a due rate, it is a sure sign that there is something amiss. And having notice that something is amiss, a careful search will generally reveal what it is, and an intelligent effort will mostly remove it.

The following table gives the weight (including clothing) and height (or length, if any one prefers the word) of the child referred to, with approximate exactness, at birth, and at the end of each month of its first year:—

Age.	Weight.	Height.
At Birth	8 lbs.	19 inches
1 month	11 "	20½ "
2 "	14 "	22 "
3 "	16½ "	23½ "
4 "	17½ "	24½ "
5 "	18½ "	25 "
6 "	20 "	26 "
7 "	21 "	26½ "
8 "	22 "	27½ "
9 "	22½ "	28 "
10 "	23½ "	28½ "
11 "	24½ "	29½ "
12 "	25 "	30 "

It will be observed that at birth the child was eight pounds in weight and nineteen inches in height. This is no more, in either respect, than most male children are; it is probably not above the average of the healthy. Girls are somewhat less in both respects.

At three months the child's weight was sixteen and one-half pounds, which is over twice the original weight. This is the increase which a fairly developed child is usually said to make in the first six months, and not a few fail to exceed it within a year. Here the weight was over three times as much at eleven months as what it was at birth. Children that are very heavy at birth, say twelve pounds, rarely treble their weight within their first year; indeed, they generally do not do much more than double it.

The rate of increase in weight and height of the child was greatest during the first three months. For over three months there was a daily gain of over an ounce. The rate of increase during the fourth month was about two-thirds of an ounce daily. During the fifth month it was less, the falling off being produced, possibly, to some extent, by the cutting of two pairs of incisor teeth. The increase during the sixth month was nearly as great as in the fourth. During the seventh and eighth months it was somewhat over half an ounce daily. Warm weather may have had something to do in keeping it down during the seventh month. During the ninth and tenth months it was about two-fifths of an ounce daily; and during the eleventh and twelfth months somewhat less than two fifths.

According to M. Bouchut, a child should gain 6.68 ounces weekly during the first month, and each month subsequently .44 ounces less than this per week till the end of the year, the increase then being 1.76 ounces weekly. Such an even decline in the increase is not met with probably in any case. However, according to this rule, a child weighing eight pounds at birth would weigh at the end of three months about thirteen pounds; at the end of six months about seventeen pounds; at the end of nine months about twenty pounds; and at the end of twelve months about twenty-one and a half pounds.

An examination of the table will show that there was an increase in both weight and height every month. Such, indeed, was the case week after week, without exception, I believe.

The proportion existing between the weight and height is deserving of very careful study, for, from the fact that some children are naturally of larger growth than others, the relations between the age and weight is a sufficiently poor stand-

ard by which to judge of the condition of children at any time. The figures given indicate that in the child's case there was an increase of about an inch in height for every increase of a pound in weight, except during the first three months, when it was less. The increase in height was possibly greater than it is in the majority of children. The average height of healthy children at the end of the first year has been given approximately as twenty-six inches; but this is considerably too low, I believe. Dr. Hæhner's child was almost thirty inches.

An English physician, Dr. Percy Boulton, in an article on observations made by him, read, two years ago, before the Harveian Society, and which has attracted wide attention, lays great stress on the importance of observing the proportion between the height and weight of children. He states that no difference what the rate of increase in height in different cases may be, "weight for height should be in each case identically the same." This rule possibly applies in children under three years of age; but Dr. Boulton's conclusions were based on observations made on children three years and upward. The Doctor found that "between three and four feet the increase in weight should be two pounds per inch, and between four and five feet two and a half pounds per inch." He states that a healthy, well-developed child is about three feet two inches in height and forty pounds in weight when three years of age. It would seem that the increase in weight per inch is much less during the first year than subsequently.

It may not be amiss to say, in this connection, that it should be borne in mind that the character of all children's tissues is not alike. Some have an excessive proportion of fat. Such children are flabby and inactive. The child whose measurements are given was not markedly fat at any time, and he was extremely active and strong all along. He received more exercise, probably, than most babies.

I will now give, as a matter of interest, a statement of the weekly increase in weight among the children in the New York Infant Asylum, as determined by the series of observations made under the supervision of Dr. Evetsky. The Doctor found that the average weight at birth was 7.176 pounds; that the average weekly increase during the first month was 2.53 ounces in spite of an actual decline of 1.08 ounces during the first week; that during the second it was 5.79; that during the third it was 5.12; that during the fourth it was 4.69; that during the

fifth it was 4.26; that during the sixth it was 3.89; that during the seventh it was 1.91; that during the eighth it was 3.46; that during the ninth it was 1.70; that during the tenth it was 1.69; that during the eleventh it was 2.68; and that during the twelfth it was 3.04.

Commenting on the result of his observations Dr. Evetsky says, "It will be seen that the child loses during the first week; then the growth rapidly increases, reaching its maximum during the seventh week. During the third, fourth, fifth, sixth and seventh months its energy declines, gradually at first, and more rapidly during the last two months, with the exception of the twenty-fifth and twenty-ninth weeks, when the growth is more active, reaching the lowest point during the twenty-eighth, twenty-ninth and thirtieth weeks. In the course of the following seven weeks (the eighth and ninth months), the growth is again more active, but it declines from the thirty-eighth to the forty-first week. From the forty-second week to the forty-fifth the child grows again with more vigor, which remains almost the same up to the end of the first year, with the exception of the forty-sixth, forty-seventh and forty-eighth weeks, when it is somewhat depressed."

In explanation of the manner of growth observed by him, Dr. Evetsky says: "The study of the growth of children during the first year leads to the following conclusions: Early childhood is composed of a number of distinct periods, of which the first is the *transient* (transition?) period, when the child's nutrition undergoes a change from the normal intra-uterine to the normal extra-uterine type. The pathology of this period rests upon the inadequacy of the feeble and imperfect efforts of assimilation to meet the requirements of the energetic nutritive processes. The second period is that of *normal extra-uterine nutrition*. After this there is a succession of three *dentition* and *inter-dentition* periods. The pathology of dentition rests upon the irritating influence of teething being transmitted to the nerve centres, producing certain disorders in the general and local nutrition and leading to a disposition to disease, or constituting the actual morbid processes. During the inter-dentition periods the child's health returns to the normal state. The growth of the child is not a process of itself, neither is it governed by its own laws, but is a faithful and correct representation of the child's general well-being. Consequently, its great clinical importance should be recognized. As information derived from weighing the child relates mainly to the state of the nutritive pro-

cesses, while the linear measurements give us information concerning the energy of cellular life, both methods should be used concurrently in the study of this branch of pediatric physiology."

Dr. Evetsky's remarks in respect to the effect of dentition on growth are, perhaps, much too emphatic; still, even in healthy children under hygienic influences the process has considerable effect, as a rule. In very many children met with in practice, the cutting of the teeth has undoubtedly a decidedly disturbing effect on the general health.

A few special features of the child's physical unfoldment will now be spoken of briefly.

Toward the end of the third month the child could readily and firmly hold in his hand any object placed therein. Two weeks later he began to put objects other than his fingers in his mouth. At five months he could easily reach out his hand and take hold of objects. Midway between the third and fourth month he could turn his head to observe objects. On the day he was six months old, it is stated of him in the record, that he "is able to sit up unsupported"—an ability which is commonly said to be acquired some time in the third quarter. Ten days before he was eight months old he could stand up cleverly when he had any point of support to cling to. At eight months he could crawl easily from point to point—an exercise in which he was allowed to indulge freely. A few days before he was ten months old he could stand alone, and a month later made slight attempts to walk, but walking was not fairly begun until he was a year old. If he had not been an expert creeper it is likely he would have walked sooner, for a good creeper is very sure to be disinclined to resort to a slower mode of locomotion. Many children walk before they have completed their first year.

When the child was four and a half months old one of the two middle incisor teeth of the lower jaw made its appearance. This is early, but not remarkably so for a child whose bony system is well developed. The old assertion, retailed so confidently in the books, that "dentition commences about the seventh month," to use the words of Paulus Aegineta, does not hold good in the majority of cases. It not infrequently begins as early as the fourth, and sometimes as late as the tenth month. Another notion which does not hold good in a large proportion of cases is that the teeth come in pairs, the upper ones first. However, in this child's case the whole eight incisors were present when he was eight and a half months old. While they were coming through he seemingly suffered but little. In

some cases the lateral incisors are not present until the sixteenth month, or even later. It was only the other day that I had occasion to lance one in the lower jaw of a girl over sixteen months, in whom, by the way, the four small molars, two in either jaw, had been present for over a month. The cutting of the child's upper double teeth began when he was just eleven months, which is a year earlier than it is in not a few children. It troubled him somewhat; he was slightly feverish and restless, and a little inclined to have catarrh, with some disturbance of the alimentary apparatus. At the end of his twelfth month a molar on either side of the lower jaw were just appearing.

An entry in the record, made when the child was one year old, reads as follows: "So far he has not been affected with any disease whatever." It might be said that he did not suffer once from even a decided cold, colic, skin eruption, or chafing. It is a common idea, in the nursery at least, that every infant may be expected to have repeated attacks of colic. This is a mistake; no child who is free from disease at birth should ever suffer from colic. When a child is so affected, it is, as a rule, palpable proof that the nourishment it is receiving is not good, or that it is overfed, or that there is something else at fault in its case. It is not too much to say that if a child free from hereditary disease suffers habitually from colic, it may be reasonably assumed that its attendants are not performing their duty intelligently and faithfully.

Another entry made at the end of the child's first year reads as follows: "He has not cried five minutes continuously since he was born." As a matter of fact he never cried half that time continuously. Yet he was always very spirited; his abstinence from crying was not due to natural apathy. Really no child that is well and wisely cared for is ever inclined to cry. Pain and irritability of temper are the main causes of the crying of children; and these will not be present, as a rule, if the management is of the right sort.

Here is still another interesting item of the record inserted at the end of the year: "For many months the child has had, as a rule, but one alvine evacuation daily. In his early months there were seldom more than two, and frequently only one." I am disposed to believe that this is as it should be; in spite of statements enough to the contrary, it is not natural for an infant to have three or four evacuations daily. It nearly all depends on the quality and amount of its nourishment. The child's mother led a perfectly regular life and lived on simple fare, the main

item of which was milk; and she fed him, for the most part, at set periods. Up until the end of the first year his nourishment was derived from the breast exclusively.

A few additional facts in regard to the child's condition at the end of his first year may be given. The circumference of his head was $18\frac{1}{2}$ inches, of his neck 8, of his chest (without clothing) 19, of his forearm 6, and of his leg $7\frac{1}{2}$. His pulse at various hours, on many different days, when awake, was at or near 140 per minute. When asleep it was about ten beats less. In the books it is said that the pulse of a child during the first year is from 115 to 130 per minute.

Besides the influences referred to, or hinted at, as bearing on the unfoldment of children, there is one about which I cannot refrain from saying a few words before concluding. The influence to which I refer is that of the seasons. Unless an infant is very wisely cared for, both the heat of summer and the cold of winter are apt to have a retarding effect on the growth. If the heat of summer, however, does not produce prostration of any account, it is then that growth progresses most rapidly, as one might expect. The child the facts of whose physical unfoldment I have given, was born on the 29th of January, 1881. The heat of summer did not apparently have any prostrating effect on him at any time.

PLACENTA PRÆVIA.

BY J. D. STRAWBRIDGE, M.D.,
Of Danville, Pa.

Early in the summer of 1851 a woman ran crying from a house which I at that moment happened to be passing, and I turned to see what was the matter, when, recognizing me, she exclaimed, "Oh! Doctor, come up quick, Mrs. L. is dying." Following up stairs as rapidly as possible, I found the patient lying on her left side, her back toward me, near the edge of the bed, through which blood flowed in a stream to the floor. I inquired, "Is she in labor?" and the reply, "I guess so," was scarcely given, when a torrent of blood poured over the side of the bed, flooding for some distance the uncarpeted floor. A low, stifled moan, gasping breathing, ineffectual efforts at vomiting, the blanched face, and almost complete unconsciousness, showed clearly that there was no time to lose. I instantly threw off my coat, bared my right arm, and introducing my hand into the vagina, through a relaxed and easily dilated vulva, passed my finger rapidly around inside the os, which I found relaxed and dilated to nearly two inches in diameter, and through which a mass of placenta

presented. I searched for some point of detachment by which to reach the membranes, but found the placenta firmly adherent all around to within little more than half an inch of the edge of the os. The fetus could be felt through the placenta, but moving so freely in the abundant waters as to evade the touch, and prevent the presentation being ascertained. Finding a slight break in the presenting placental mass, directly across its centre, without hesitation or a moment's delay, I thrust my hand in this opening, through the placenta into the uterus, giving exit to a large flow of waters; grasping the vertex, which came at once into my hand, I gave it a turn to the left, then placing my finger in front of the right shoulder, while the waters were still discharging, rotated the body on its axis until the feet were brought nearly to the front, where they were easily reached, the child turned and delivered, within ten minutes from the time I entered the room. The secundines, inverted through the torn placenta, followed immediately after the head. The child, which was in the beginning of its seventh month, showed no signs of life, and no effort was made to resuscitate it. As soon as it could be laid to one side, I administered to the mother (who had partially recovered consciousness), a teaspoonful of tincture of camphor in water (the only stimulant at hand), and a few minutes later, 30 grains of powdered ergot in infusion. There was no further hemorrhage, and the patient, although in a state of extreme exhaustion, recovered rapidly, without a bad symptom, and within the month was able to look after the affairs of her household. The placenta proved to have been placed centrally over the internal os, and was torn through, close to the insertion of the cord.

As soon after as my patient could be safely left I called upon Dr. Wm. H. Magill for advice in this case, and learned that he had had an almost similar experience with the same patient about one year before. Mrs. L., being then in her first pregnancy, and, as she supposed, in her sixth month, was suddenly taken with a large flow of blood while standing at work; she was put to bed as soon as possible, and her physician, Dr. W. R. Gearhart, called; finding no signs of labor, the vagina was tamponed and the Doctor left to attend to other calls; returning a few hours later, he found the patient faint and weak, and, notwithstanding the presence of the tampons, the hemorrhage was again becoming dangerous. Alarmed at this condition, he sent in haste for Dr. Magill, who at once removed the tampons; finding the os sufficiently dilated, he detached the

placenta at the side, ruptured the membranes with his fingers, and rapidly effected version and delivery by the feet; although no delay occurred in delivery, and but little force was required, the child showed no signs of life. A little less than one year from my first attendance I was again called in haste to Mrs. L., and found her in bed, having been taking suddenly a few minutes before, with profuse hemorrhage. She was then near the end of her sixth month of pregnancy, and, certain that I had again a placenta prævia to deal with, I had in my pocket a package containing three drachms of powdered ergot, which I handed to one of the attendants, with directions to put it in half a teacupful of boiling water, and return with it immediately. While preparing for an examination, a sudden gush of blood, which filled the bed and clothing about the patient, warned me that there was no time for delay, or the catastrophe so narrowly averted on the former occasion might be realized on this. I found complete dilatation of the soft parts, some small coagula still in the vagina, and blood flowing in a continuous stream from the partially dilated os, through which a mass of placenta presented; a partial detachment at one side, where a forming bag of waters could be felt, enabled me to rupture the membranes at once and pass my hand up into the uterus, as the waters flowed rapidly away, and the head began to come down. I found the pressure of my hand had almost completely arrested the hemorrhage. The attendant was directed to administer one-third of the infusion of ergot, and I determined to await results. At the end of fifteen minutes a second portion was given, and in about fifteen minutes more uterine contractions began, and soon the head was pressing down firmly into my hand, which I began slowly to withdraw, taking care not to relax pressure on the placenta until it was compressed firmly by the head. The labor progressed rapidly, and within an hour from my arrival a dead child was delivered. The patient was but little more exhausted than in an ordinary labor, and was able to be up on the tenth day. In December of the same year I learned from Mrs. L. that she was again pregnant, and dreaded a recurrence of her former trouble. I charged her to go to bed and send at once for a physician on the appearance of the slightest hemorrhage. Accordingly, in the latter part of January, 1883, I was called, and found her in bed, having had a slight show, with some fugitive pains about the back and abdomen. A digital examination showed no signs of labor. She believed herself then at the middle of her seventh month. I enjoined rest in

bed, cold drinks, and prescribed a few doses of acetate of lead and opium; in a few hours the hemorrhage ceased, and the next day, in spite of my injunction, she was again about the house. These attacks recurred at intervals of about a week, increasing in quantity and duration of flow with each return, for which, after the first attack, I prescribed, to be alternated with the acetate of lead and opium, five grains of powdered ergot every four hours. About the middle of March I was called in haste, and found her in bed, with regular labor pains, accompanied with free hemorrhage; the os dilated to the size of a silver dollar, through which the edge of the placenta protruded. Pressing this to one side, I ruptured the membranes; the pains increased rapidly, and soon the vertex presented. With the pressure of the head on the placenta the hemorrhage soon ceased. I felt that I could trust to the natural powers for a satisfactory result. After an easy labor of about two hours, my patient was the mother of a fine, healthy boy, now a successful business man in the State of Ohio and the father of several healthy children. The family were preparing to leave Danville, and soon after went to their new home in Ohio.

While visiting a patient a few weeks since, I was introduced to Mrs. L., a fine, matronly-looking widow lady, of about fifty years; to my great surprise I found she was my former patient, whom I had not seen or even heard of for over twenty-seven years. At this meeting all the circumstances here related were recalled and discussed. I learned that after leaving Danville she had given birth to several children, without any complication whatever, but none of whom lived to grow up. She promised to see me again and furnish me more accurate data of her case, my own records having been lost while absent from home during the war; but professional duties called me from home, and Mrs. L. left Danville without seeing me again. This, with but one exception, where the condition was but partial, is the only patient in my own practice in whom I have met with "placenta prævia," although, between my last attendance on Mrs. L., in the spring of 1863 and the fall of 1860, when I temporarily retired from practice, I attended in more than 1700 cases of labor.

—An act enforcing compulsory vaccination has been passed by the Parliament of Tasmania, and assented to by the Governor. 12,000 persons in South Australia have been vaccinated during the last two months. The registered number of successful vaccinations on children under 14 years of age, in New Zealand, during the last four years, was 48,258.

HOSPITAL REPORTS.

UNIVERSITY HOSPITAL.

CLINIC OF LOUIS A. DUHRING, M.D.,

Professor of Dermatology.

Reported by FRED A. TAYLOR, M.D.

Case 1.—Erythema Multiforma.

There comes before us first a German woman, about fifty-five years old, with an eruption on her hands and arms, confined chiefly to the extensor surfaces. The disease is characterized by variously sized, ill-defined, erythematous, distinctly elevated patches, made up of split-pea sized, modified papules, tending to run together. The modifications of these papules play an important part in the picture of the disease, since they constitute it a case of erythema multiforma. It is a characteristic case of the popular variety of this disease. As the name indicates, the case exhibits a variety of lesions, which taken together, make up the definite disease. Some of the papules making up the patches are simple, distinct, and of a bright reddish hue; most of them, however, are papulo vesicles; *i. e.*, having begun as a papule and attained the size of a split pea, or larger, a vesicle has developed in the centre, which is of various size relative to the papule, and of a violaceous color, which gives a variegated appearance to the lesions that is quite characteristic of the disease. Passing your finger over the lesions you notice the marked elevation, much more distinct to the touch than to the sight. On the right arm the disease is less developed than on the left. You have observed how distinctly the disease is here confined to the backs of the forearms, hands and fingers. This is its usual seat. An eruption coming out rapidly, and confined to these regions, you may justly suspect to be erythema multiforma.

The disease is not a common one with us, but appears most frequently in the spring and autumn. As a rule, the general health is not at all or but slightly affected, and the subjective symptoms are not marked; the disease being as a rule accompanied with but little itching, though patients sometimes complain of a sense of heat or burning. It makes its appearance rapidly, and usually runs its course in from ten days to three or four weeks, disappearing of itself; it consequently is not often brought to the notice of the specialist. The disease looks more formidable than it really is. It has a tendency to relapse, however, and a person who has once had it is liable to a second attack. Both children and adults of either sex are liable to it; it is more common, however, in women between the ages of fifteen and thirty.

Treatment is, as a rule, of little avail. No internal or external remedies materially affect it. In markedly vesicular cases the fluid extract of *grindelia robusta* sometimes exerts an influence over the vesiculation, but there is no indication for its use in the present case. The disease will get well of itself, the lesions changing in color, some becoming yellowish and others bluish as they pass away.

Case 2.—Acne Vulgaris (pustulosa).

Our next case is that of a girl, seventeen years of age, in manifestly low condition of health, who exhibits an unusually marked case of acne of the face, back and chest. She has had the disease eight years; its first appearance being slight, she says, but being as bad as it now is for four or five years. It is characterized by large papules and pustules, covering nearly every portion of the face. You can hardly discover a single healthy square line on its surface. The pustules are suppurating freely so that the face is dotted over with yellowish points. On the back and shoulder-blades the eruption is scarcely less severe. Here you find papules in every stage of development; small and reddish in their commencement, increasing in size as they become older, some of them finally tubercular or suppurating; and scattered about among them are violaceous and muddy-colored spots showing where former papules have existed. The front of the chest over the sternum and upper ribs is quite thickly studded with similar lesions.

Inquiring into her history we learn that the girl has suffered from epilepsy in a mild form since she was three years of age. She has been under treatment for this latter disease many years, taking bromide of potassium most of the time. Now, as the continued administration of this drug often provokes an eruption of acute acne, we are led to suspect this to be the exciting cause in the present case. On further inquiry, however, we learn that the acne had been established before she began to take the bromide. Moreover, judging from the prescription she shows us, the amount she has been in the habit of taking is not sufficient to have produced the acne. It is, then, an idiopathic case of acne vulgaris, probably aggravated by the use of the bromide of potassium.

It will require six months, or longer, to effect a cure. Her low, ill-nourished condition indicates a constitutional treatment. We will prescribe a preparation of iron and quinia, to be taken three times a day. We will also give her, if she continues to take the bromide of potassium, two or three minims of Fowler's solution of arsenic, daily. This will be to correct the influence of the bromide on the acne. If she does not take the bromide, the arsenic will not be given. Locally, the diseased parts must be bathed in hot water, by means of a sponge, fifteen minutes, every night. The pustules must be opened, both before and after bathing, either with a needle or a sharp-pointed knife. After the bath, an ointment of precipitated sulphur, a drachm to the ounce of cosmoline, must be thoroughly applied. This treatment will be continued two weeks. At the end of that time the condition will be very much improved. The strength of the ointment will then be increased to two drachms of the sulphur to the ounce. After continuing with this three or four weeks longer, the ointment will be suspended, and, perhaps, the hot bath also. We will then, possibly, use the following lotion:—

R. Zinci sulphatis,
Potassii sulphureti, āā ʒj
Alcoholis, fʒ ss
Aque, fʒ vss. M.

Sig.—To be dabbed on every night and allowed to dry. Shake before using.

Her bowels must be kept open, if necessary, by a saline laxative, taken before breakfast. The tonics will be employed for some time, and, perhaps, later in the treatment, arsenic internally.

Case 3.—Tinea Tonsurans.

The next patient is a little boy, about six years old, with light hair, who has a disease of the scalp, exhibiting extensive characteristic patches of tinea tonsurans. It is a case, you will remember, that was before the clinic about a month ago, and I have not seen it since. At that time the treatment advised was thorough depilation of the diseased surface, and the application of *sapo viridis* followed by sulphurous acid. The treatment has not, I venture to say, been properly carried out, and there is, consequently, not much improvement. The scalp over the vertex and back part of the head is devoid of healthy hair, but is studded with the short stumps of hairs which have been eaten away by the vegetable parasite which characterizes the disease. These short hairs are loaded with the fungus. Here and there is an ill-defined circular patch, where the skin is more completely denuded. The skin is dry, scurfy, and exhibits the characteristic "goose-flesh" appearance. The peculiar light yellow color of his hair is due to the bleaching effect of the sulphurous acid which has been applied.

To effect a cure in a severe case of tinea tonsurans is no simple matter. It may require from three months to a year of attentive treatment. To be properly treated it must be seen every day or every other day, and half an hour be devoted to the careful removal of hair from the diseased surface; then the local applications must be thoroughly made. Even under such care as this, the disease may resist treatment for months. The treatment of tinea tonsurans does not generally gain much credit for the physician. It is often so obstinate a disease, and it so rarely receives the constant attention it demands, that frequently it lingers indefinitely.

By proper attention, however, any such case may be cured. In the one before us the scalp is too dry for the use of a lotion, and we will, therefore, discontinue the sulphurous acid and substitute the oleate of mercury with a strength of five per cent. Later, the strength of the ointment will be increased to ten per cent., constantly guarding against salivation. Before the applications of the ointment the surface will be thoroughly washed and depilated. We will see that our patient appears before us often.

Case 4.—Excoriated Papular Eczema.

A woman, forty-five or fifty years of age, hard-working and spare, presents herself with a disease on the front of the leg extending from the ankle to the knee. It constitutes one large ovalish patch, irregular in outline, covering the entire front of the leg and showing an erythematous surface scattered over with numerous distinct excoriated papules. It is a case of excoriated papular eczema. The whole surface has been severely scratched, and the excoriations are very marked. The disease evidently causes her great suffering. The itching, she says, is in-

tolerable, and prevents her sleeping. She has had the disease three years, but of late it has been spreading. It has an acute appearance, the lesions being bright red, and evidently recent.

It is a case where strong remedies are needed. There are two or three lotions that may be used. Carbolic acid and thymol both act happily in such cases. The alkaline tar lotion also might be used, according to the following formula:—

R. Picis liquidæ, ℥ij
Potassæ, ℥j
Aque, f℥v. M.

Sig.—Dilute a teaspoonful into two or four ounces of water, and use freely as a lotion.

In this case, however, we will first employ the carbolic acid, prepared as follows:—

R. Acidi carbolic, f℥ij
Glycerinæ, f℥ss
Alcoholis, f℥ij
Aque, ad Oj. M.

This will be applied freely, three times a day, for ten minutes at a time. The application may cause smarting, but its use should be persisted in for three or four days. At the end of this time the more acute symptoms will have subsided, and we will substitute the lotion by an ointment of white precipitate or calomel, thirty grains to the ounce of cosmoline and oxide of zinc ointment. The use of the lotion may, perhaps, be repeated from time to time. It will, probably, require several months to effect a complete cure.

Case 5.—Chancroid.

The next case is that of a negro about twenty-five years old, who has, he says, a skin disease on the penis. There is an ulcer of the size of a large split pea, occupying the inner surface of the prepuce and its reflection on to the glans penis. There are also two or three small superficial ones, and a marked excoriation on the

glans itself. The large ulcer has an elevated border, and no induration. It made its appearance as a small lesion, four or five days ago, which, he states, was about six days after intercourse. This is plainly a chancroid. You will find it stated that chancroids may appear five, seven, or more days, after infection. In my experience the sores usually make their appearance much earlier than this. I recall an exceptional case, seen recently in a physician, where an excoriation the size of a small split pea was developed within twelve hours after the infecting intercourse.

The treatment in this case will consist in his maintaining absolute cleanliness, by washing the parts three or four times a day, and then dusting with a small amount of iodoform powder. If the odor of the powder is too offensive, it may be made into an ointment with balsam of Peru and vaseline:—

R. Iodoformi,
Balsami peruviani, āā gr. xv
Unguenti petrolei, gr. xxx. M.

Sig.—To be applied two or three times daily.

The ulcer will probably soon heal under this treatment.

Case 6.—Purpura Simplex.

This man, about forty-five years of age, comes before us to show the result of the treatment we prescribed a week or two ago, for purpura simplex of the thigh and legs. You will remember that when he was before us last, the thighs and legs were everywhere thickly mottled with small hemorrhagic spots of a reddish and purplish hue. To-day he is much better. The lesions have faded to a light brownish-red color, and in some places have almost entirely disappeared. His treatment was a drachm of the fluid extract of ergot, three times a day. The remedy will be continued.

EDITORIAL DEPARTMENT.

PERISCOPE.

Quebracho.

In *El Genio Médico-Quirúrgico*, Madrid, January 7th, 1882, Dr. Fr. Simon, of Nieto, publishes an interesting report on the above substance, from which we extract as follows:—

Quebracho is the bark of a tree (*aspidosperma quebracho blanco*) which grows in South America; in color it resembles calisaya bark, and has a hot, bitter, and intensely disagreeable, acrid taste. Penzoldt first noticed its medicinal value; others, among whom Berthold, Krauth, Schütz, and Laquer, have also experimented with it. All the observations thus recorded agree with those made by Dr. Simon, and point to quebracho as a specific in dyspnea, whether resulting from asthma, or chronic or acute affections of the re-

spiratory or circulatory systems, or when due to emphysema and pulmonary catarrh.

Two methods of preparing quebracho have been recommended by Penzoldt: the one, a tincture (1 to 10), of which the dose is from forty-five minims to one drachm, daily; the other, an aqueous extract, which is obtained in the following way: 150 grains of pulverized quebracho are digested in three ounces of alcohol; they are then evaporated and dissolved in water; the solution is filtered and evaporated to dryness. This forms the dry extract, of which the dose is from 15 to 30 grains, daily; or it is dissolved in twenty times its weight of boiling water, and then constitutes the liquid extract, which Penzoldt prefers to any other form, not excluding *aspidospermine* (an alkaloid obtained by Frande); two to four teaspoonfuls of the liquid extract may be given daily.

Dr. Simon details six different cases in which he administered quebracho successfully, besides some interesting experiments made upon himself, and he recommends the two following formulae:—

R. Tincture of quebracho (1 to 10), $\frac{3}{4}$ j
Water, $\frac{f}{3}$ iss
Syrup, $\frac{f}{3}$ ss. M.

Sig.—A tablespoonful every four hours.

R. Dry extract of quebracho, gr. xxx
Water, $\frac{f}{3}$ iss
Syrup, $\frac{f}{3}$ j. M.

Sig.—A teaspoonful every half hour, until relief is obtained.

He concludes his report with the following observations:—

1. Quebracho is a substance possessing the property of moderating respiratory movements; it acts, in truth, as the digitalis of the lungs.

2. It relieves dyspnoea, whether resulting from purely nervous disorders, or when due to anatomical alterations in the respiratory or circulatory apparatus.

3. Its action is immediate and its effects safe, at least, so far as observed.

4. Its effects on dyspnoea caused by circulatory troubles warrant the belief that it not only acts directly on the nervous system governing the respiratory movements, but that its influence extends over cardiac innervation.

5. Finally, it is believed that quebracho facilitates expectoration.

Addison's Disease.

From the London *Medical Times and Gazette* we learn that an interesting contribution to the pathology of Addison's disease was brought by Dr. Goodhart before the last meeting of the Pathological Society, and gave rise to a still more interesting discussion. The cases briefly consisted in atrophy or complete disappearance of the supra-renal capsules, associated with all the clinical features of Addison's disease in a marked degree. It would appear, therefore, that the changes in the capsules which Addison and all subsequent writers have considered essential to the disease may, after all, be only one of several conditions capable of giving rise to this group of symptoms. Many facts were brought forward in support of this opinion. Dr. Goodhart himself was of opinion that such cases as these strongly suggested the view that changes in the abdominal sympathetic were the real source of the symptoms—a view which was traversed by Dr. Pye-Smith, who, after pointing out that the adrenals were obsolete organs in adult life, the removal or destruction of which in animals produced no effect, warned his hearers against the acceptance of this neurotic theory, on the ground of its extremely simple and seductive nature. He supplemented this by pointing out that pigmentation of the skin was very common, and that there was neither pathological nor physiological analogy in support of melasma being due to nerve changes. Dr. Coupland was hardly prepared to accept Dr. Pye-Smith's views, and pointed out the striking analogy presented by the vomiting and pigmentation of pregnancy

in support of disorder or implication of the abdominal sympathetic. He did not think that structural changes need necessarily be found in the nerve ganglia themselves, although he had met with one notable example, where fibrosis with atrophy of cells existed. He expressed his belief that the changes in the supra-renal capsules were of the nature of a localized tuberculosis, which might take place without any symptoms of Addison's disease. Dr. C. Creighton, in regard to the function of these bodies, referred to the researches which had shown that the blood issuing from the capsules gave chemical reactions different from those which were obtained from blood entering them, and argued that changes, such as atrophy, or caseation, which practically cut off the blood supply, might lead to such alteration in the blood as would bring on pigmentation, while cancerous changes, which increased the circulation through the organs, would have no such effect. Finally, Dr. Fowler referred to a case of lymphadenoma, in which the abdominal sympathetic was largely invaded, where the capsules were healthy, and in which all the symptoms of Addison's disease were present.

Fibrous Tumor of the Uterine Neck.

Paris *Médical*, January 21st, 1882, reports, that at a sitting of the "Académie de Médecine," M. Depaul exhibited a tumor which he had removed from a woman arrived at nearly her full term in pregnancy, and which not only rendered delivery impossible, but would have caused the death of both mother and child.

The patient, a woman 32 years old, was in her fourth pregnancy, the three others having terminated normally. Her general and local health were unimpaired. A few days prior to her admission into the lying-in hospital she felt something protruding from the lips of the vulva, and, according to her report, a midwife and a physician both declared it to be part of the placenta which had become detached. On examination, M. Depaul discovered protruding from the vulva a purple-red tumor, as large as the extremity of the hand. Its texture was firm, although supple and elastic, and it emitted a most fetid smell, due to contact with air and want of cleanliness, as there existed no trace of gangrene. The tumor so filled the vagina as to prevent the finger from reaching the orifice of the uterine neck. M. Depaul ordered a full bath and postponed further examination. The next day he found the patient in labor. The projecting portions of the tumor had increased to the size of two fists, and it pressed against the vulva in such a way that a finger even could not be introduced into the vagina. The waters had drained off, and the child was suffering; this was evident from the reduced heart beats. Immediate action was necessary. M. Depaul gradually drew the enormous mass from the vagina, and by careful examination made sure that its point of adherence was on the left side of the anterior lip of the neck. In drawing out the tumor part of this anterior lip had followed, and it became clearly visible that this was the seat of the fibrous mass. With the aid of a bistoury, M. Depaul severed

the pedicle of the tumor, and found that it measured between five and six centimeters. As is the case with fibrous uterine bodies, no hemorrhage followed.

This tumor was remarkable on account of its weight, which was fifty-six ounces, it being the largest that has thus far been observed.

After removing the tumor the child was delivered by means of a blunt hook applied on the hip fold, it being a breech presentation. The child was still alive, and both it and the mother are now in perfect health.

A histological examination of the tumor showed that it was composed of elements from the connective and smooth fibrous tissues. There were besides cavities containing sanguineous collections.

A New and Reliable Operation for the Cure of Webbed Fingers.

Arthur T. Norton, F.R.C.S., contributes the following to the *British Medical Journal*:—

C. K. was sent to me by Mr. Moore, of Chiswick. The boy, one of four children, was about four years of age, and had the three inner fingers of the left hand webbed together. No relative had suffered from the same deformity. The operation which I performed can be best explained, and, indeed, can only be understood, by referring to the diagram.

A tongue of integument was cut from between the knuckles, and another corresponding in shape, and position, and size, on the palmar surface. These tongues were then raised by dissection, and the webs cut through. The knife was then carried back so as to sever all the tissues as far back as the bases of the tongues, and a little superabundant tissue was removed. Next, the apices of the tongues were sewn together, and lint, dipped in cold water, applied. The flaps or tongues united by the first intention between the little and ring fingers, but one of the pair between the ring and middle fingers sloughed at its apex from its suture. The cause of the sloughing was incomplete section of the tissue between the fingers up to the base of the tongues, the result of which was too great tension, and consequently giving way, at the suture. However, even in this case, the tongues separated only a very short distance, and the interspace rapidly healed, so that there was no redevelopment of the web.

A drawing of the hand was taken after the operation, by which it will be seen that, in the case of the middle and third finger, a little more tissue might have been removed with advantage after the raising of the tongues, in order to bring the line of the natural web into proper position. The healing of the fingers progressed rapidly in the middle finger and on the outer side of the ring finger. Between the ring and little fingers the healing was not so rapid, because the web be-

tween these fingers was thick and narrow, so that, after its section, a larger surface was denuded.

The points to be considered in performing the operation are these: 1. The tongues should be cut thick, so that their vascular supply may be complete, and the chance of their sloughing reduced to a minimum. 2. They should be cut rather narrow, with judgment; otherwise, they are compressed laterally and bulge upward at the margins, instead of lying in adaptation to adjacent tissues. Such compression, of course, interferes with their circulation. 3. The tissue between the knuckles is to be cut back, or, if necessary, cut away, so that the apices of the tongues shall lie well in contact with each other without tension. 4. The tongues must be of sufficient length, so that there shall be no tension when the suture is applied; they had better be too long than too short. 5. The apices of the tongues are very small, so that a very small needle should be used to carry the suture. 6. In shaping the tongues the line of the natural web should be carefully observed. If the tongues



heal by first intention, no web can redevelop. There is no reason whatever why union by the first intention should not invariably take place if the above points are remembered while performing the operation, and thus one of the most troublesome and unsuccessful of operations is converted into one of the most simple and most certain of success.

Splenotomy Not a Justifiable Operation in Leucocythæmia?

Herbert Collier, M.R.C.S., contributes a lengthy paper on this subject to the *London Lancet*. From it we note that twenty years ago extirpation of the spleen for disease of that organ was

looked upon rather as a surgical experiment than a recognized operation; and of the four cases which had up to that time been put upon record, the first two were discredited by the majority of writers, and the other two, which had both proved fatal, were regarded as conclusive evidence of the hopelessness of the operation. The first case of splenotomy in England was performed by Mr. Spencer Wells, in 1865, for simple hypertrophy, and the result was sufficiently encouraging to inspire not a few surgeons with the hope that at no distant date removal of the spleen would become as recognized and valuable an operation as ovariectomy was at that time. Mr. Spencer Wells' example was followed by Mr. Bryant, in 1866, and again in 1867, and both patients sank almost immediately after the operation. An exhaustive statistical table of twenty-nine operations furnishes the following results. It was performed sixteen times for leucocythæmia and thirteen times for various other morbid conditions of the spleen. It appears that out of the thirteen cases in which leucocythæmia was absent, no less than eight recoveries are recorded, while out of the sixteen in which the latter disease was present, there is no instance in which the patient recovered even from the primary effects of the operation. Now, it must strike the most casual observer that the fatality in these latter cases is due to something outside the mere effects of the operation, which, in itself, appears to be less dangerous than one might reasonably be led to expect. And surely, few will deny, although many appear to forget, that this "something" is actually present in these cases, and readily explains the cause of surgeons losing at the rate of a hundred per cent. after splenotomy in leucocythæmia.

Dr. Gowers, writing in "Reynolds' System of Medicine," says:—

In leucocythæmia the tendency to hemorrhage is unquestionably greater than in most cases of simple splenic anæmia, and this constitutes a danger so great as to render the operation (splenotomy) scarcely justifiable in the advanced stages of the disease. Naturally, a risk of immediate death so great as is and must be involved in the operation is only consented to when the disease is advanced, and the œdema and dyspnoea in themselves indicative of the greatest source of risk—the profound blood change. We are yet, moreover, without any evidence as to whether the removal of the spleen would be attended with an improvement in the deficiency of the red globules, which constitutes the greatest source of danger.

Professor Mosler, writing on excision of the spleen as a remedy in leucocythæmia, thus concludes his remarks: "These facts lead us to the conclusion that neither in the early nor in the late stages of leucocythæmia is splenotomy justifiable; and, indeed, that operations even of the most trifling character are to be as far as possible avoided."

Summing up the lessons taught by his two cases, Mr. Bryant, writes: "We have thus learned two things from the cases related. First, that the enlargement of the spleen in leucocythæmia appears to be only a part of a general disease affecting the glandular system as

a whole; and, second, that in splenotomy for such a disease there is a predisposition to hemorrhage with which surgery is incompetent to deal. It can neither be foreseen by any amount of care, nor coped with by any amount of skill. Under these circumstances there is no shirking the conclusion that the operation is physiologically unsound and surgically unsafe, and for leucocythæmia, should not be performed." To these remarks, coming as they do from one who has fully realized upon how slight a fabric the theory of splenotomy as a remedy for leucocythæmia is built, it will surely be unnecessary to add more. And, in conclusion, let me trust that the recorded facts, together with the condemnation of the operation by the high authorities I have quoted, will suffice to prevent the further repetition of this useless and deadly experiment.

Two Cases of Paroxysmal Hæmoglobinuria.

Dr. Robert Saundby reports the following instructive cases in the *Medical Times and Gazette*:

In the *Medical Times and Gazette*, for May 1, 1880, I described a remarkable and unique case of hæmoglobinuria in a youth of sixteen, who presented the following peculiarities: He was of a peculiar yellow, anæmic complexion, the yellowness being more marked during his attacks; he had an enormous spleen, reaching down to the umbilicus; his blood presented the characters of slight anæmia; his urine *always* contained more or less hæmoglobin. I mentioned that it was hereditary, his father having had a similar enlarged spleen, and passed water of the same character; and that a sister was also a victim to this peculiar affection.

Recently I was called to see the sister for a trifling indisposition, when I ascertained the following facts: She presents no abnormal physical signs, especially no evidence of splenic enlargement; her complexion is slightly ochre-tinted, like the brother's; her urine always contains a trace of hæmoglobin without albumen. She is now sixteen, and had menstruated for a short time regularly, but this has stopped for the last six months. She appears in other respects a well grown, well developed, intelligent young girl.

The brother has exhibited symptoms of mental aberration which gave rise to so much difficulty that I certified him as insane, and he was for a short time in an asylum. He seems quite unable to settle to any occupation: his mind is full of the most extravagant schemes; he appears unable to realize his position in life, and systematically ignores the state of his health. He has several times run away from home, at one time getting as far as Belgium. There is no history of insanity in the family, but during the latter part of his father's illness he was very peculiar; he was at times violent to his wife, and he distressed her very much by confessing to her that he had been unfaithful—a statement which she took pains to investigate, and she assured me that she believed it was entirely unfounded.

At the end of 1880 I had a young gentleman sent to me by my friend, Mr. G. W. Tait, of Knowle, as a case of chronic Bright's disease. He had had persistent albuminuria since Janu-

ary, 1878, and had been seen by several physicians—among others by Dr. George Johnson—by all of whom he was regarded as a case of Bright's disease. He had spent the previous winter in Italy. His own account of himself was that he had had several attacks of hæmaturia without any dropsy; the first came on with a sore throat. On examining his urine it was clear, specific gravity 1.008, and contained a dense cloud of albumen, but no casts. There was no cardiac hypertrophy, nor evidence of polyuria; the pulse was hard. His general appearance was that of a fairly healthy, well-developed young man, and the constant absence of casts in the urine induced me to give a guarded but favorable opinion of his case. The idea of hæmoglobinuria was present to my mind, but had little to support it at that time. I saw him from time to time during that winter, but lost sight of him till last October, when I was sent for to see him at a country house where he was staying, and found him in bed, perspiring freely, in no pain; pulse 108; temperature 104.2° Fahr.; tongue furred; bowels confined; fauces slightly injected; no sickness or headache; no oedema; physical signs in thorax and abdomen negative. He told me that he had had a cold for a fortnight, and had felt "shivery" for the last few days, but had had no definite rigor. His urine was black, and contained hæmoglobin, albumen, granular matter, and hyaline casts. On the following day his temperature at the same hour (4.30 P.M.) was 105.2°, and the urine just passed showed, under the microscope, granular matter, hyaline and granular casts, and pigment, but no blood-corpuscles or oxalates. He was ill altogether about three weeks, but the urine began to get slowly lighter after four or five days. I tried him with chloride of ammonium for a day or two, but he disliked it, and it produced no effect, so I substituted two grains of quinine, three times a day, dissolved in hydrochloric acid, which, together with an occasional dose of Carlsbad salts, he took until he was convalescent.

This case is of interest on account of the persistence of albumen in the urine, a symptom which has been recorded in another case by Dr. Forest. He has had no relapse since, but I have strongly urged the desirability of his seeking some occupation in a warm climate.

Accidents from Pilocarpine in Croup.

In *Paris Medical*, No. 50, Dr. Bouchut thus observes: After reporting cases of croup in which favorable results have been obtained from pilocarpine injections, it is but fair to speak of the cases wherein those injections have produced serious accidents. Quite recently I have had an opportunity of experimenting with this substance on a great many children in the *Hôpital des Enfants Malades*, and I have obtained no beneficial results worth mentioning. The bulk of my observations confirm what has already been said by Weiss, Neumeister, Knater and many others. The only effects I have been able to discover are prostration and collapse, although I never gave one-third to two thirds of a grain daily, as recommended by Guttman.

During my absence from the hospital two children were treated, and while so weak a dose as one-sixth of a grain was used, yet the most serious toxic effects were produced. A summary of these two cases will best illustrate the results attending this medication.

CASE 1.—Girl, 6 years old; well characterized membranous croup. Treatment: Papaine, chlorate of potash, and ten drops perchloride of iron. After a few days of this treatment slight improvement. The same treatment was then continued, and in addition, a subcutaneous injection of pilocarpine was given. Profuse perspiration; no salivation. The following day another injection was given. Salivation now became abundant; perspiration very copious. The patient was seized with a violent chill; cyanosis of the face. The upper part of the body became cold, lower extremities moist. One or two attacks of vomiting. Two injections were given the next day and attended with similar results. The following day but one injection was given. Same symptoms. The throat appeared somewhat better, but the general condition was bad. Paleness of face, and great prostration. The daily injections were now discontinued. Vomiting and chills ceased; but the larynx became embarrassed; the cough grew croupy; the voice weakened, and asphyxia followed; owing to general depression, no operation was performed, and the patient died.

CASE 2.—Female child, 2½ years old. Same general symptoms, and same treatment. The pilocarpine injections produced no vomiting, but were otherwise attended with similar results as in the first case, and the child died after a few days.

A Halfpenny Swallowed by a Child and Vomited Five Weeks Afterwards.

Dr. R. T. Jenkins reports the following case in the *Medical Times and Gazette* :—

A little boy, five years old, was playing with one of his relations. He seized a shawl which was on the sofa, put it to his mouth, and bit it. At the same moment he was attacked with a fit of spasmodic coughing, and a bronze halfpenny, which was observed to be upon the shawl, was suddenly drawn into his mouth, carried backward during a forced inspiration, and sucked down, unintentionally. A physician was called in at once, and made an unsuccessful attempt to extract the coin with forceps. The third day the child complained of pain at the pit of his stomach. Vomiting after taking food and after the paroxysms of coughing became more frequent. The child lost flesh and became much weakened. He could only retain a very small portion of food at a time.

One morning, five weeks afterward, the child vomited. In the matter vomited the mother observed a solid substance, dark in color, and thickly coated. She put it into water, and after much washing she found it to be the missing halfpenny. It was much corroded, but the distinctive features of the coin were visible on both sides.

The child has not suffered any further inconvenience.

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A NEW DEPARTURE IN MEDICAL ETHICS.

The recent action of the New York State Medical Society is worthy of more than a passing notice, since being, as it was, the deliberate act of the representative body of our profession, of the greatest State in the Union, its action, we are forced to conclude, will carry much weight, and will be very potent for good or evil, as the wisdom or error of its judgment may predominate. It was the first time in the history of medicine that a formal and powerful assault has been made upon the barrier that separates the old from the new school. It was claimed by some of the more ardent advocates of professional ethical liberality, that the code of ethics ought to be abolished entirely, and the broad rule be substituted in its place, that every physician should be required merely to "act as a gentleman." This seems like going back to first principles, for upon this basis professional and civil law really has been erected. The golden rule of "Do unto others as you would that they should do unto you," means nothing more than

that you should at all times be "a perfect gentleman."

But different men view the same question from different standpoints, and thus arrive at widely divergent conclusions. Hence has it been necessary to become more explicit, and reasoning up from the basis of the golden rule (common to all civilization), to enunciate certain definite rules for the guidance of men; to say you can do this, and you cannot do that. Since the origin of homœopathy, until the present day, a wide and impassable chasm has separated it from our school. Why? Because, as we had occasion to say in a recent issue, the two systems of treatment are antagonistic, they are irreconcilable, and one must be wrong while the other is right. There can be no half way business about it; homœopathy must be potent, or it must be valueless.

If, then, a man believes that the true system of combating disease is to be found in the regular practice, how can he possibly tolerate homœopathy.

If he believes that it requires four or five grains of a certain drug to produce its therapeutic effect, how can he, without stultifying his avowed belief, admit that a small fraction of a grain of this same drug can produce equally beneficial results.

If he cannot give his honest adherence to this law of infinitesimals, how can he conscientiously openly countenance homœopathy, by consenting to consult with those who believe in and practice its teachings.

If, believing that it is wrong, that its agencies are incapable of curing diseased conditions, he still countenances and encourages it, so as to cause those who look to him for counsel and advice to rely upon its remedies and to place confidence in its practitioners, then does he indeed, as we have already said, become guilty of "compounding a social felony." Because, by his action, he causes his followers to believe in that which he does not himself have any faith in.

To illustrate, familiarly: the physician who would refuse to have his wife, his children or himself treated homœopathically, would express by his refusal, louder than any words could do,

his disbelief in the efficacy of the homœopathic *materia medica*. If, now, such a gentleman should consent to consult with a homœopath, he would be doing wrong morally, since he would, for some motive or other, be doing for others what he would consider to be wrong for himself and his own.

There are, of course, two sides to this much-discussed question. There are some homœopaths who are so only in name. To further their own temporal interests, they make an open profession of this belief, while in truth they view disease from our vantage ground and combat it with our forces.

Now, when asked to consult with such a man, by consenting no crime is perpetrated against society, since by meeting him and deciding upon a course of treatment that you are sure beforehand will coincide with your conscientious views, you are not knowingly and willfully doing an injury to your fellow-man.

This seems to be the ground upon which the New York Society based its action, since the statement was made that homœopaths are to-day practically regular physicians in all but the name. This, however, is too broad a view, since there are at the present time many *Simon pure* followers of Hahnemann, with whom we can have no professional intercourse without prostituting our sense of right.

Again, even when we consent to consult with what we might call liberal homœopaths, we are not strictly acting the part of the "*perfect gentleman*," since the little monitor (*conscience*) within us constantly reminds us that we are countenancing deceit.

There must, then, be a right and a wrong. If the abstract principles of homœopathy are correct, then the fundamental doctrines of our practice must be based on false premises, and vice versa. If, as was stated at the meeting referred to, the disciples of Hahnemann do not now adhere to his teachings, but give their allegiance to our doctrines, then ought they to come out openly and manfully and embrace our faith. If they do not; if they still conscientiously adhere to the aborted but well meant reasonings of their apos-

tle; if they still believe that the most minute doses and the most infinite attenuations are potent and requisite to cure disease, then must we, in the confident strength of our own faith, say they are wrong; that they are no doubt honest in their belief, but that their doctrines and dogmas are fallacious and impotent; and thus saying and believing, we cannot, in justice to ourselves and our fellow-men, openly countenance their practice.

We do not believe in violent denunciation of any honestly believing man; but we do maintain that there must of necessity be a right and a wrong to every question. If one man says, "You give too much medicine in every case; your doses are too large, and you reason from fallacious grounds," while his opponent answers, "Your doses are ridiculously small and cannot have any appreciable effect," one or the other must be wrong. It would be equally "*compounding a social felony*" for the conscientious homœopath to consult with the strictly scientific physician, as it would be to reverse the case.

Such legislation as the New York State Medical Society has seen fit to pass can remove the penalty from this wrong-doing; it can give the sanction of professional law to this social wrong; but it cannot remove nor disguise the self-evident fact, that when the conscientious believer in our principles and doctrines consents to meet at the bedside one whose belief and whose prospective methods of treatment he honestly considers to be useless or worse than useless, he is doing a social and moral wrong, he is sacrificing his conscience, and in doing so, is fully under the impression that he is doing his patient an irreparable injury. This action on the part of an influential society has opened the ethical door, through which many easy-going consciences can pass; but let us hope that the better portion of the profession will, as they always hitherto have, regard it honestly impossible to professionally meet those whose methods of curing disease they consider fallacious and invaluable. Liberality of belief, and tolerance of those who may differ from us in anything, is commendable, but conscience must never be sacrificed.

COMMISSIONS TO EXAMINE ADULTERATED FOODS AND ARTICLES OF COMMERCE.

Some articles that appear in this issue will direct the attention of thoughtful physicians toward the dangers to health that exist unsuspected in articles of diet, as well as in many different objects offered for sale. It seems strange to talk about disease of the liver in an oyster, yet you will note that such an authoritative source as the Chief Medical Officer of Health, of Dublin, has found such a condition to exist, and points out a green color of the oyster as diagnostic of the disease. Probably but few of our readers have ever seen this condition, but within a few days we encountered such an oyster, in a stew, and wondered at it, until we saw the article referred to. The oyster we noted was distinctly green, of a bright color all down one side.

It is well known that various articles of food are frequently adulterated, but attention has not been sufficiently directed to this channel. The physician who desires to produce the greatest amount of good and to cure the largest number of patients will do well to inquire into the articles of food that have been used by patients to whom he is summoned, and whom he finds suffering with vomiting, diarrhoea, or other symptoms of *acute indigestion*.

If due, as they are in the majority of cases, to the ingestion of some poisoned food, you must remove the offensive articles from the system. Anodyne and sedative remedies will do no good, since the foreign and poisonous elements, still remaining, will keep up the irritation of the stomach or bowels, while an emetic or a dose of castor oil will discharge the cause and allow the *vis medicatrix naturæ* to cure the sufferer.

Too little attention is paid to the influence of poisoned food in production of disease, and physicians are too much prone to peer too deeply into the etiology of many common disorders, when by the exercise of a little common sense the cause would be found to be staring them in the face.

Again, children's toys are often the cause of acute enteritis or gastritis, since they are generally coated with poisonous paints, which are

licked off and swallowed, innocently and thoughtlessly. These few words are given merely to direct the attention into this channel, and to cause physicians to realize that many cases of acute departure from health are due to this cause. The question we consider of so much importance that we will in a future issue furnish a special report on the subject.

But the great question comes in, "How can we prevent such adulterations, and the use of such poisoned food?" In one way only, namely, by legislation, by the appointment of committees whose duty it shall be to examine into the quality of all articles offered for sale, and to decide whether or not they are in any way inimical to health. We desire to turn your thoughts in this direction, and to prepare you for our report.

NOTES AND COMMENTS.

Nasal Calculi.

Dr. Rumbold made some remarks to the St. Louis Medical Society (*St. Louis Medical and Surgical Journal*) on this odd subject. The calculi are due to the formation of cretaceous masses. The samples he presented to the Society weighed four ounces; they were removed on different occasions, from a syphilitic patient, in whom the septum of the nose was destroyed, and the inferior turbinated bone partially gone, so that they could be grasped quite readily with an instrument. Their growth was very rapid.

Renal Lithotomy.

In the *Medical Times and Gazette*, Mr. Henry C. Butlin reports an interesting case of renal lithotomy. The patient had for several years suffered from severe attacks of neuralgia of the testis. After he was admitted into the hospital, the pain was discovered to be seated in the right side of the abdomen as well as in the testicle, and that the symptoms were rather those of renal colic than that of neuralgia of the testis. The urine contained crystals of calcium oxalate, occasionally a trace of albumen, but no blood or pus. The general health was fairly good. As treatment did not afford permanent relief, Mr. Butlin cut down on the kidney, through a vertical incision in the lumbar region. The kidney appeared to be healthy, but a calculus was discovered and removed from the renal pelvis. It was composed of calcium oxalate, was about as large as a filbert

and quite prickly on the surface. The patient made a good recovery, so that in two months he was discharged, entirely free from pain, and entirely well, except that a little pus was present in the urine. The wound was treated, as far as possible, like an ordinary lithotomy wound. The absence of blood in the urine, in this case, is especially remarkable, when the situation and nature of the stone is considered.

Xanthopsia.

At a recent meeting of the Clinical Society of London (*Lancet*) Mr. W. H. Kesteven read the following notes of a case of xanthopsia. On an exceptionally hot day, last July, a married woman, aged twenty-three, having exposed herself to the full heat of the sun, was seized with acute pain in the occiput, and found that she saw all things red and green. As the pain passed off, in the course of a day or two, this intense coloration diminished. The ophthalmoscope revealed the existence of a large patch of double contoured nerve fibres at the upper part of the disk of the right eye. This, when first seen, was very prominent, and gave evidence of the existence therein of some neuritis. The left disk was normal. The color vision of the left eye was normal, but with the right eye she saw all things yellow. This condition continued for more than three months, and then gradually passed away. The author suggested that the condition might be explained by the violent impression made by the rays of the sun impinging directly on the retina. The case was examined by two other gentlemen, who confirmed the ophthalmoscopic appearances described.

Poisoning by Chromate of Lead in Weavers.

Dr. Robt. C. Smith contributes the following cases to the *British Medical Journal*. Mrs. B., aged 30, a weaver in a cotton mill, has been unable to work for six weeks; suffering from great weakness, wandering pains in her limbs, and anæmia. Her gums show well marked signs of lead poisoning. No albumen in urine. She attributes her illness to the inhalation of a yellow dust that was given up from the yarns in the process of weaving an orange-colored cloth. She had always enjoyed good health before being employed on this class of goods, and stated that her fellow workers, when engaged on this kind of work, sooner or later sickened. Mary C., a weaver in the same mill, was seen a few days subsequently. The blue line was very distinct. Her breath was offensive, while the skin and

conjunctivæ were of a distinctly yellow color. There was obstinate sickness and purging of dark, sap-green motions (probably stained with chromium oxide). Urine contained albumen and a trace of chromium, but no bile nor lead. This girl's sister presented the same line of symptoms. Some seventy similar cases were observed from the same mill. In one fatal case distinct traces of lead were found in the liver. Public opinion being aroused, pressure was brought to bear on the employers, who have since then caused the yarn to be more carefully dyed and prepared before being woven. The winders and weavers wear a muslin respirator over the mouth and nose when at work; and use hooks to thread the shuttle, instead of sucking the weft through its eye with the mouth. By these precautions, rigorously carried out, the operatives, though still weaving chromes, no longer suffer from lead poisoning.

In these cases, the yellowness of the skin was the first symptom to disappear, and the blue gums the last. He concludes that, after absorption, the dichromate undergoes decomposition within the blood; the lead being fixed in the tissue, while the chromic acid combines most probably with soda—a compound which is intensely yellow, and stains the liquor sanguinis and skin for a time; and finally leaves the body by the liver and kidneys.

Functure and Aspiration in Intestinal Invagination.

We read in *Paris Médical*, January 28th, 1882, that Dr. Godfrey has treated a case of intestinal invagination as follows: The patient, a man 37 years old, was vomiting a greenish-yellow liquid having a most offensive fecal odor. His abdomen was distended, and very tender to the touch; and distinct fluctuation together with dullness were perceptible over the entire course of the colon. The umbilical region was somewhat tympanitic. Great tenesmus existed, and the efforts at defecation only resulted in the passage of a little bloody mucus. Having carefully ascertained that no hernia existed, the intestine was punctured, first in the left, then again in the right iliac region, the largest needle of a Codman and Shurtleff aspirator being used for that purpose. More than a pint of liquid, similar to that vomited, was thus withdrawn, and the patient felt somewhat relieved. Vomiting now became less frequent, and finally ceased. Morphine, first hypodermically, then by the mouth, procured sleep, and after three days the intestine had resumed its functions, and in less than a week the patient was again well.

Subcutaneous Injections of Iodoform in Syphilis.

The *Centralblatt für die Med. Wissensch.*, No. 44, reports that Dr. Thomann, having observed the good results attending the external use of iodoform in the treatment of certain syphilitic manifestations, was led to try if similar benefits could not be derived from it in the form of subcutaneous injections. He made use of a solution containing 3 ias of iodoform to f3 v of glycerine, and commenced with doses of grs. iuss; finding that these were well tolerated, he gradually increased them to grs. xj. He selects, in preference, recent cases in which sclerosis has not as yet caused irreparable disorders in any of the organs, especially in the lymphatic ganglions.

After ten or twelve injections, made on different parts of the body, he has observed a marked retrocession in the symptoms. No abscesses were formed, and only among a few patients were the injections followed by a slight sensation of pain, which, however, soon disappeared. The solutions used should always be freshly prepared.

Dementia and Idiocy.

M. Magnan, of the St. Anne Asylum, recently made a communication to the Soc. de Biologie, regarding a patient who had passed from a state of dementia to that of complete idiocy. He considers that in dementia the cortical lesions of the brain are not extensive, but that as they tend gradually to become complete, the patient, as the cerebral atrophy progresses, becomes more and more idiotic. Idiots are entirely oblivious to external impressions; they can neither observe, taste, nor hear; at least, external sounds have no influence over them; patients in a state of dementia, on the contrary, preserve in their state of intellectual feebleness some faculties almost intact. The patient presented by M. Magnan was at first in a state of dementia, but gradually lost the few words she remembered, and the peculiar swaying of the body from side to side, the indecisive, vague, frightened look observed in idiocy soon appeared. The results of the autopsy proved interesting; the right cerebral hemisphere was almost intact, but the left presented adherent meningitis, with considerable atrophy and diffused sclerosis about the vessels of all the convolutions, with the exception of the frontal and ascending parietal. As the patient was not hemiplegic, this was another proof in favor of the present localization of the motor centres. This observation would seem, also, to warrant another conclusion, viz., that the right

hemisphere has but a feeble part in the intellectual value of the individual.

Scrofula and Tuberculosis.

The *Medical Times and Gazette* says that M. Grancher recently made to the Société Médicale des Hôpitaux of Paris an interesting communication on the above subject. The following are his general conclusions: 1. Tubercle is a fibro-caseous neoplasm, the development of which takes place in successive stages, during a longer or shorter period; this complete evolution may be accomplished in a few months, or it may last throughout the whole of life. It may, however, be arrested during the earlier stages, and never get beyond them. 2. Pathological anatomy and experimental pathology are to-day agreed to include under the term tuberculosis the greater number of affections called scrofulous, as local tubercloses. 3. Lupus, and superficial inflammations of the skin and mucous membranes, the last resort of those who persist in regarding scrofula and tuberculosis as distinct, will probably be included in the same order in due process of time. 4. The necessities of practical medicine, which, after all, must first be reckoned with, do not permit all tubercular affections to be confounded together; on this account it is convenient to retain the word "scrofula" for those tubercular affections which are very slight and generally curable.

Severe Illness Caused by Ingestion of Cakes and Cheese.

The *Dublin Journal of Medical Science* says that early in January of this year a young woman and two children ate some ginger cakes bought in a small shop in a suburban village. Shortly afterwards they became very ill, with choleraic symptoms. One of the patients suffered from vomiting, one from severe abdominal pains, and all three from diarrhoea. The remaining cakes were examined for ordinary poisons, but none were found. They were soft, and had evidently swollen from their original dimensions. They were in great part covered with minute cryptogamic vegetations, composed of *penicilium glaucum*, and the blue *ascophora mucor*. On breaking into the cakes, several cavities were found in them, which were lined with fungi, most of which belonged to the species *ascophora nigricans*, but not a few were of a species that could not be identified. In addition to the moulds, there were numerous bacteroid bodies. A portion of the cake, weighing 185

grains, was kept for three hours in a water bath; it was then eaten by a mouse; another portion was subsequently given; the next morning the mouse seemed perfectly well. The same quantity, without being heated, was given to a mouse, and in less than two hours the animal died, death being preceded by diarrhoea and spasmodic action. It is probable that among the ordinary fungi which appear in decaying food, and which do no harm, there are occasionally moulds or other low forms of life—animal or vegetable—which are highly poisonous.

From the same source we note the case of a man and his children, who, having partaken of butter and cheese in the evening, became very ill during the night. The father awoke, four hours after he had taken his meal, with violent headache; vomiting and diarrhoea followed, and continued during the whole night and the following morning. The children—four in number—had suffered from the same symptoms as their father during the night, and three of them were affected with diarrhoea all the following day. The youngest child, aged three, *did not have vomiting*, but cried all night, and died early on the following day. A post-mortem revealed extravasated blood in the lungs, which were slightly congested. Left ventricle contained liquid blood; the right auricle contained numerous soft and recent clots. The abdominal viscera did not present any abnormal appearance that would account for death. The mother of these children, who had not partaken of the cheese, remained in her usual health. The cheese in question had a greasy texture, a yellowish hue, and an intensely rancid odor, combined characteristics which must always be regarded with suspicion. It is, perhaps, some chemical products of putrefaction and not fungi which cause rancid cheese to be noxious, for cheese is often in a putrescent state and remarkably free from moulds, while, on the contrary, mouldy cheese is often free from decided rancidity. (These two cases point two morals: 1st. When called to a case of sudden sickness, presenting symptoms referable to a deranged stomach or bowels, inquire into and examine the remnants of the last articles eaten. 2d. The necessity for the establishment of commissions to examine and analyze all articles of food offered for sale.—Ed.)

Illness Caused by Filth in Milk.

Dr. C. A. Cameron, Chief Medical Officer of Health for Dublin, reports, in the *Dublin Journal of Medical Science*, the following interesting facts concerning a hitherto scarcely noted cause of milk

impurity. A specimen of milk was submitted to him for examination, which was believed to contain a toxic substance of some kind, for the following reasons: Three children who were in the habit of drinking largely uncooked milk, were taken sick. They presented furred tongues, and gastric symptoms, such as are usually present in the earlier stages of enteric fever. Temperature 104.5° F. The house was new, in a healthy location, and no bad odors had been noticed. The sanitary arrangements were in good order. The children had been healthy two days before. A general examination of the milk in stock was made; it presented a peculiar appearance, the cream which had risen to the surface having a deep brown color. A short time before the children's illness a similar brown stratum had been observed on the milk. Generally the milk presented no peculiar features. The composition was found to be—

Water.....	87.10 per cent.
Fats.....	3.56 “
Other solids.....	9.34 “
	<hr/> 100.00

It was, therefore, milk of good quality; but a microscopical examination of the cream taken from this milk revealed the presence of cow's hairs, minute particles of straw, and *débris* of organic matter in great abundance. There were numerous monads, vibrios, and bacteroid bodies. The odor of the cream was slightly but distinctly unpleasant. A subsequent visit to the dairyman was made. He at first loudly protested that he sold only *pure* milk. The cows were examined and found healthy; no cause whatever could be discovered for the impurities. Finally, on pressing the milk vender for an explanation, he stated that the cows were milked early in the morning, by his nephew, who had no light with him, and omitted to wash the teats of the cows before allowing their milk to flow into the milk pails. As some of the cows had lain down all night in such a way that their udders were in contact with the manure in or close to the channel courses, their teats were covered with filth. (A word to the wise is sufficient; this report demonstrates how easily good, pure milk can be rendered poisonous, and the remedy suggests itself at once to every intelligent man.—Ed.)

Treatment of Cardiac Asthma.

The *Union Médicale* states that M. Dujardin Beaumetz recommends the use of bromide of potassium in those cases of intermittent dyspnoea which are really a cardiac asthma, and

which are so frequently attendant on aortic affections. Owing to its action on the bulb, this salt will be found valuable in all conditions of dyspnoea and angina. Small doses of pure, crystallized chlorhydrate or bromhydrate of cicutine may be added to it. Iodide of potassium in progressive doses of from one to four grams (gr. xv-3j.) is also serviceable in asthma from aortic affections. When the paroxysms moderate, the patient should only take about grs. xxij, daily. Another remedy, recommended by Professor Sée, consists in inhalations of iodide of ethyl. The patient should breathe from five to ten drops, five to eight times daily. Finally, subcutaneous injections of morphine have been found of benefit.

SPECIAL REPORTS.

NO. III.—INFECTIOUS DISEASES (Continued.)

As a fitting conclusion to our several reports on infectious diseases, we will give this week a summary of the remote effects of these diseases on children.

We are all aware, but we do not sufficiently realize, that many of the chronic derangements of children are due to the remote effects of infectious diseases. We all realize that fatal kidney disease, in not a small proportion of cases, supervenes as an effect of scarlet fever, and from this knowledge we gain a warning not to be disregarded, namely, that the sensitive and denuded cutaneous surface of the child convalescent from scarlet fever must be scrupulously protected from the action of cold until such time as it shall have put on a new covering.

We are also taught that various forms of paralysis are liable, frequently, to be manifested as sequelæ of diphtheria, and we are thus forewarned to be on the lookout for and promptly meet them when they do occur. But in a recent address, delivered by Dr. JAMES CARMICHAEL, extra physician to the Royal Hospital for Sick Children, at Edinburgh, attention was called to the fact that we do not sufficiently note the influence of infectious diseases in the production of subsequent ill health. He says, "In the out-patient room of a children's hospital, the oft-repeated expression of '*falling*' or '*wasting away*' is one of the most frequent which the physician hears. A careful physical examination, in a large proportion of cases, will be sufficient to reveal the presence of some disease. Not unfrequently, however, such exploration fails to throw any light on the case, and it is only after an attentive consider-

ation of its history, and a more prolonged study, that we can arrive at any conclusion as to its nature."

The truth of this picture must be evident to every practicing physician, who, surely, has often had brought to him children who, their parents say, do not seem well; they offer no definite symptoms, neither can the most careful examination reveal any positive disease. They do not eat well; they start and cry out in their sleep; caring but little for play or the ordinary pursuits of childhood; they seem listless and languid, preferring to remain about the mother's knee, and being nursed and petted. The slightest indiscretion in their care and management will precipitate some acute derangement.

A careful and persistent inquiry into the past history of many of these cases will elicit the fact that at a greater or shorter interval they have had some infectious disease which, being regarded as one of the necessary concomitants of childhood, has created no alarm and has been forgotten, but upon refreshing the memory, it will be discovered that this condition of depraved health manifested itself shortly after the supposed complete recovery from the disease.

We know that all zymotic diseases most profoundly impress the blood; we might then imagine that in many cases this action upon and alteration of the vital fluid would so influence the various parts of the body nourished from it, as to modify and depress their vital activity to such an extent as to interfere with their thorough physiological life, producing thereby a condition of languor and imperfect performance of duty incompatible with perfect health, yet not sufficiently definite to constitute any particular disease.

If, however, such imperfect nutrition and incomplete vital phenomena are permitted to persist unchecked and unrelieved for a length of time, they may ultimately eventuate in irreparable disease of some vital organ. Thus, then, it becomes important that we should recognize and be warned against this possible future danger, that we may check it in its incipency.

Dr. CARMICHAEL tells us that the most common causes of chronic ill health in children are syphilis, rickets, and scrofula. They all act, of course, in the same way, and their gross pathology is easy of comprehension. They consist essentially, as we know, in a foul and poisoned condition of the blood, which we can readily conceive must poison and contaminate all the organs and parts it touches. He reminds us, that when we ask the question, "Has the child ever had any previous

illness?" the reply is usually in the negative; but when we supplement this by the question, "Has the child ever had measles, scarlatina, or whooping cough," an affirmative is at once given, thereby conveying the impression that mothers consider these diseases of little or no importance in the catalogue of their children's ailments.

Some years ago, a young physician of great promise, who had just graduated with high honors, was substituting for a medical friend who was resident physician in one of our hospitals. He was called upon to amputate a gangrenous limb. When cutting through the bone, the saw slipped, inflicting a slight wound on one finger. A few days subsequently he was seized with convulsions, and within seventy-two hours died of Bright's disease. The existence of the disease had been unsuspected, but it was remembered that some eight or nine years before he had scarlatina, from which his family then remembered that he seemed to never have thoroughly recovered, although they paid no attention to his condition before the supervention of the convulsions, since he presented at no time any definite symptoms of ill health. It would seem, here, that the disease had remained dormant for years, until excited and stirred into fatal activity by the absorption into the system of the gangrenous poison from the amputated limb.

In obedience to the generally recognized law, that organs or functions develop tendencies to disease in direct ratio to their normal or physiological activity, Dr. CARMICHAEL notes that in children the acute diseases are a fruitful cause of initiating chronic disturbance of function or disease in certain organs, or systems, which present great functional activity in the early periods of life. He says that a certain proportion of those children who are attacked with measles, scarlatina, or whooping cough, suffer immediately or remotely from chronic ill health, which may or may not be accompanied by some organic affection of internal organs. Among the more ordinary conditions, he notes *general debility*, as a result of which the child may fall a prey to some other disease, the ravages of which, once started, the debilitated system is unable to resist. Lymphatic glandular affections may follow any of these diseases.

During convalescence from measles and whooping cough we must ever remember that the bronchial lymphatic glands have, during the course of the disease, been enlarged and irritated, and that they may remain so, giving rise to ultimate caseous degeneration of the glands, debility, and death, or may cause secondary

general tuberculosis, which usually causes death in children by meningitis; and this brings him to say a few words as to the diagnosis, more particularly, of enlarged bronchial glands. These glands are situated in the posterior mediastinum, in immediate relation to the bifurcation of the trachea and the roots of the lungs. On the surface of the body the site of the former corresponds anteriorly to the first bone of the sternum, posteriorly to the second or third upper dorsal vertebrae. The glands are ten or twelve in number, and lie in the cellular tissue of the posterior mediastinum, in close relation to the trachea and bronchi. It may be at once stated, as a fact generally admitted, that, although considerably enlarged, their recognition by physical exploration is usually attended by negative results. One of our most careful clinical observers of disease in children states, "In order to afford signs of its presence, the disease of the glands must be sufficient to produce considerable enlargement; for unless their size is so much increased as to produce derangement of function in neighboring organs, the lesion is one which cannot be satisfactorily diagnosed." It may be stated, likewise, with tolerable probability, and my own experience bears this out, that in the larger proportion of all cases met with, and in those in which serious results follow the chronic glandular hyperplasia, the enlargement has not been sufficient to cause injurious pressure on neighboring structures. If this be the case, the usual signs which are described as denoting the presence of these buboes, such as venous turgidity and lividity of the face and neck, dyspnea and spasmodic cough, and dullness, either anteriorly over the upper sternal region, or posteriorly, will not be present.

In general terms, it may be stated that, given a child who has suffered within a year or eighteen months previously from either of these diseases, and who is in a chronic state of ill health, undergoing progressive wasting, with no symptoms of disease of any internal organ, the probable existence of bronchial phthisis, more rarely of mesenteric phthisis, may be suspected. The two following cases from the experience of Dr. CARMICHAEL thoroughly illustrate this position:—

Alex. McD., aged 2½, was brought to the Royal Hospital for Sick Children, on 8th of February 1881, suffering chiefly from debility and wasting. The mother stated he was a healthy child till he was attacked by measles, a year ago, since which he has never been quite well. He was a breast baby. There were no marks nor history of syphilis. On examination, all organs yielded negative results as to signs of disease. There was nothing positive in regard to the child's con-

dition but progressive emaciation. He was under careful observation for five months, and the course of the case was watched with interest by the gentlemen attending the out door clinic. I ventured to express an opinion, many weeks before the child died, based upon the general history of the case, and its negative clinical features, but more particularly on account of the antecedent history of measles, that subsequent to this disease, and as a direct result of it, bronchial glandular hyperplasia had been established, followed by cessation of the glands, and that probably general tuberculosis would follow, or was then actually existent. The subsequent history of the case amply verified such a diagnosis, the child succumbing to meningitis a few weeks after. On post-mortem examination, the tracheo-bronchial lymphatic glands were enlarged and caseous, the lungs, liver, and other organs studded with small, gelatinous-looking, so-called miliary tubercles, and the brain presented all the usual characters of meningitis. This is a very ordinary history, as the records of our hospital testify.

Marion C., aged 3 years and 8 months, was brought to the hospital on August 10th, 1880. She was a healthy child, and never suffered from any illness until six months ago, when she was attacked with pertussis, which lasted for four months. Since then she has been quite free from cough, but her general health has not been satisfactory. On examination, she was not an unhealthy looking child, being fairly well nourished. She was, however, languid and listless, had little appetite for food, the bowels were irregular, the muscular system was soft and flabby. Ordered emulsions of cod liver oil, regulation of diet, and change of air, if possible. On the 13th inst., or three days after examination, she began to be troubled with vomiting, coming on at irregular intervals, without reference to the ingestion of food. On the 15th inst. drowsiness supervened, and she sank rapidly, from meningitis. On post-mortem examination, the brain presented all the usual signs of basic meningitis and general sub-arachnoid effusion. The ventricles contained about six ounces of fluid. The lungs, liver, kidneys, and peritoneum were studded with tubercles. Broncho tracheal glands enlarged and caseous.

Nasal catarrh, that may persist throughout life, is a frequent sequel of measles and scarlatina.

Thus, then, we comprehend the dangers that may arise, subsequent to an attack of any one of the zymotic diseases. This knowledge teaches us in no uncertain terms the lesson that we have not always cured our little patients, when we have safely piloted their delicate bodies through the text-book stages of a zymotic disease. We must have them under our observation for a long time, and in all cases where any degree of debility persists for two or three weeks after the subsidence of the disease proper, it must be removed. For this purpose, cod liver oil, the syrup of the phosphates of calcium and iron, as well as other tonic treatment, must be resorted to. Indeed, it would be a good rule, and one that would insure

your being on the safe side, were you to place every child convalescing from an infectious disease upon this tonic treatment, and surround it with the best possible hygienic measures.

CORRESPONDENCE.

Diphtheria.

ED. MED. AND SURG. REPORTER:—

It will not be amiss, in connection with the concise study of this disease presented in the "Special Reports" of your issue of the 4th instant, to draw a brief practical lesson.

The glory of medicine as a science and art, is to avert and heal disease. To these points all its lights converge. A properly adjusted experience is present knowledge, and a guide to future wisdom.

As a study and basis of experience to others, I wish to again call attention to the value of the liquor potassa in this disease. In June, 1876, my experience to that time was given in the *Boston Journal of Chemistry*, and reprinted in the *REPORTER*. The results of additional experience were given to Dr. F. M. Peterson, of Greensboro, Alabama, and by him incorporated in his thorough and exhaustive article on the subject in the "Alabama State Medical Transactions," for 1881. Two cases have been treated since then, making a total of forty-three cases, with three deaths; a limited experience compared with many others, but wide enough to be at least suggestive and hopeful.

How this treatment may bear the test of other localities, with different climatic surroundings, I cannot say, but it is to this point of test that I wish to lead the minds of the profession, as one of the at least hopeful means of waging successful war with this fearful disease.

The usual method adopted by me is as follows: Suspecting or recognizing the disease, if a purgative is needed, which I have not often found to be the case, I give, preferably, as the safest and surest purgative, a full dose of calomel, suitable to the age of the patient. If the patient is an adult, twenty drops of the liquor potassa are given in half a glass of water every three hours, with proportionate doses for children; two drops being the dose at same interval for a child one year old. Between each dose I give, each hour, full doses of the syrup of lacto-phosphate of lime, freshly made; the formula for making is given below. The dose for an adult is one or two table-spoonful at the above mentioned interval, increasing the dose with increase of debility. It may be diluted or not, as preferred. Full proportionate doses for children. I rely on this as a powerful adjuvant. It has almost incomparable value in staying the waste of the system in all asthenic diseases, and in promoting assimilation; and besides, I am led to believe, has some specific value in neutralizing the poison.

We have here two medicines, one tasteless in its dilution, the other exceedingly palatable; great points of advantage in themselves. The liquor potassa destroys the vitality of the poison,

the syrup of the lacto-phosphate of lime sustains, prevents breaking down, and probably, has a specific control over the poison. What more can we desire in the therapeutic art, if a larger experience shall confirm the value of this method of treatment. Later in the disease, when the membranous exudation has given way, I use this syrup of lacto-phosphate of lime in its emulsion with cod-liver oil. The emulsion to be freshly prepared. If the heat of the skin is great, the body is freely and often anointed with bacon rind, till the temperature is reduced. No local applications are made to the throat, internally nor externally, save the free use of the bacon rind. For diet, boiled sweet milk, buttermilk, and some of the malt extracts. Lemonade is also given freely, when desired, as a drink.

As a matter of course the physician will investigate the cause. In one of my fatal cases, evidently decaying Irish potatoes under the house produced the disease. This practice of storing away Irish potatoes under our houses, elevated from the ground on brick pillars, as they are, and open for free access of air, is a common one in our latitude, eminently productive of organic disease, and need only be mentioned to be condemned. If this article shall lead others to a full and careful test of the practical value of the above course of medication, my object will be gained. It will be found, by crucial test, that other remedies are adjuvants. I believe the liquor potassa, from my own point of observation, to be the nearest approach to a remedy yet known, to destroy the poison of the disease.

SYRUP LACTO-PHOSPHATE OF LIME.

R. Chloride of calcium, $\frac{3}{4}$ j
Phosphate of soda, $\frac{3}{4}$ iv
Concentrated lactic acid (best), f 3 j. M.

Sig.—Dissolve lime and soda in separate waters, mix solution, wash precipitate on filter, and dissolve it in the acid, filter and mix with simple syrup, to two and a half pints.

EDWARD H. SHOLL, M.D.
Gainesville, Alabama, February 21st, 1882.

Mustard in the Treatment of Smallpox.

ED. MED. AND SURG. REPORTER:—

Just before the close of the war I was called to prescribe for a Confederate soldier, suffering with great nausea. A large mustard plaster was ordered to be placed over the stomach. A few hours afterward my attention was directed to an eruption covering the part where the mustard had been placed. It was a well developed case of smallpox. There was no eruption on any other part of the body. The pustules were well developed, with the characteristic pit. I did not have another opportunity to try it, but believe a mustard plaster applied to any part of the body will bring out the eruption twenty-five to thirty-six hours earlier than usual, so that a diagnosis can be made on the first day of the fever. I believe it possible to invite all the eruptions to any part of the body, and thus avoid the pitting of the face. And in malignant cases, where the poison produces death before the eruption appears, the mustard might

possibly bring out the eruption and save the patient. The experiment is easy and harmless.

E. S. LYNDON, M.D.
Athens, Ga., Feb. 20th, 1882.

The Prevention of the Zymotic Diseases.

ED. MED. AND SURG. REPORTER:—

In carbolic acid, I think, the profession will find a preventive of the zymotic diseases; I refer particularly to three diseases: diphtheria, scarlet fever, and typhoid fever. When an epidemic of either of these occurs, and my plan of prevention is thoroughly carried out, the result has always been, either the progress of the epidemic has been checked entirely, or the severity of the disease lessened; a malignant type changed to a mild one; individuals and families who adopted my suggestions would have the disease in a light form, or escape entirely, while those who did not receive my treatment would contract it in a malignant form. My custom is, when a case of either of the above mentioned diseases occurs, to commence immediately the internal administration of carbolic acid (with directions that the clothing, person, etc., should be washed in a weak solution of the acid) to all those of a family or community that I judge would be likely to contract the disease. These statements may not be credited, Mr. Editor, and all I ask is that skeptics and critics will try my method before they condemn it.

W. W. BROWN, M.D.
Kabletown, W. Va., Feb. 15th, 1882.

NEWS AND MISCELLANY.

Canal Boat Children.

In France no child under fourteen years of age is allowed to live or work in a canal boat, and no woman is permitted to live in the barge cabins without special permission from headquarters, although there is ample space for them. To prevent breaches of the law in these respects, special officers are appointed by the Government to board the boats, barges, etc., at certain points.

When a Lady's Horse Shies.

Those of our readers who reside in the country and are accustomed to depend on horses for the transportation of themselves, their wives and daughters, may derive a valuable hint from the following, which we take from the London *Lancet*:—

It is an unpardonable crime to mount a lady—however good a rider she may be—on a horse that shies. If, however, an animal addicted to this serious habit is intentionally ridden by a female, she should sit on that side that gives her the least risk of being unseated. Young girls are trained to ride some days on one side and some on the other side of their ponies, for the sake of their figures. It would be well if women kept up the practice. This alone would give a lady a firmer seat on a horse, and by simply adapting the saddle to the peculiarity of the particular horse when a risk was intentionally run, the danger of accident might be minimized. Most

horses shy more from one side than the other, and many only on one side, as when the sight is failing in one eye. It is curious that even practiced riders, who are well versed in horse flesh and manners, scarcely ever take the trouble to examine the eyes of the strange horses they mount casually.

Cleanliness next to Godliness.

An exchange says, "To the peasant, the Russian bath, a moist variety of the Turkish bath, is a 'second mother.' When Peter the Great was advised by foreigners to introduce hospitals and dispensaries into Russia, he was wont to reply that Russians needed nothing else as a health-giving remedy against mortal ills, when they had baths."

Flowers in Sleeping Rooms.

A correspondent, commenting on a note in our issue of February 11th, on "*Flowers in Sleeping Rooms*," refers to some papers on this subject written by Dr. J. M. Anders. These papers take the ground that growing plants are beneficial to health, and are very excellently written. It would seem, however, that this question has never been definitely settled one way or the other. It would appear to be an open question, upon which discussion is desirable.

Gout.

The London *Medical Times and Gazette* thus replies to a correspondent: Touching gout, the great Sydenham consoled himself with three satisfactory reasons: 1. That more wise men had it than fools. 2. More rich than poor. 3. That it was more incident to men of strong than of weak constitutions. Some wise men think it dangerous to cure gout, and Shakespeare, who had a good notion of physic, says, in *Cymbeline*:

"One that's sick 'o the gout had rather
Groan so in perplexity, than be cured
By th' sure physician, Death."

The Coming Sanitary Congress at Newcastle-on-Tyne.

Recently a deputation from the Sanitary Institute of Great Britain, consisting of Professor F. S. B. F. DeChaumont, M.D., F.R.S., Chairman of the Council, Mr. G. J. Symons, F.R.S., Professor W. H. Corfield, M.A., M.D., Chairman of the Exhibition Committee, the Secretary, and the Curator of the Exhibition, met the Mayor and Sanitary Committee at Newcastle-on-Tyne, to make arrangements for the Congress and Exhibition which is to be held by the Institute in that town in the autumn of this year. Several buildings were visited, and suitable ones selected for the various meetings and the Exhibition. The Congress and Exhibition will be opened on Tuesday, September 26th.

Green Oysters.

Dr. Gaillard, in the *Annales d'Hygiene* (Dublin *Journal Medical Science*), states that oysters acquire, by confinement and other conditions, a

green color, which is probably due to disease of their livers. This diseased state appears to cause an increase in their adipose tissue, and, consequently, of their succulence. These green oysters command a high price, therefore the art of adulteration has stepped in, and oysters are artificially colored by dipping them in solutions of copper salts. In a dozen oysters colored by this method chemical analysis demonstrated the presence of 0.147 grain of metallic copper, a quantity capable of exciting vomiting and other perturbations. Persons who had eaten only seven of these artificially colored oysters felt unwell. The suggestion is made to wash the suspected oysters with a solution of acetic acid and the dipping of a needle into the washings. If copper be present, it will be deposited upon the needle.

Maternal Impressions.

Dr. F. J. Baker, of Lockport, N. Y., sends us a circular letter asking information on the following points; if any of our readers can assist him by sending any knowledge they may possess on the subject to the above address, they will be assisting the progress of science:—

1st. Have any cases come to your knowledge or observation, of foetal deformities or "marks" attributable to mental impressions on the mother during pregnancy?

2d. Have you any knowledge of cases tending to establish the doctrine of materno foetal symmetry, bearing particularly on ante-natal education?

Any information you may be able to give which will assist us in cultivating this interesting field of study will be most gratefully acknowledged.

South Africa as a Field for Medical Practice.

Jas. S. McDonagh writes to the *Lancet*, under date of January 30th, 1882, as follows:—

The Africans have an idea that the medical men who go out to settle among them are the refuse of home produce, and unless a man has superior qualifications or settles in a remote part of the country, they are chary in seeking his advice. In Cape Town, seventy-five cents for a visit and medicine is the common charge. Living is very high; he has known as much as one dollar and ninety cents to be paid for a cabbage. The day when men went out to South Africa and made fortunes in a few years is passed. The inhabited parts are overstocked, and unless a man settles in these with the best qualifications or proficiency in some specialty, e.g., ophthalmic surgery, and can afford to wait, he had best remain at home.

Items.

—The Boston *Medical and Surgical Journal*, says: "L'entrée est défendue aux dames" is certainly not a suitable inscription to be placed over the portals of a University; and it is satisfactory to be assured by the President of the Boston University, in his last report, that a phrase so often seen over certain apartments in French railway stations will be denied a place upon the front of the University building.

OBITUARY NOTICES.

DR. THEODORE LEWIS MASON.

Dr. Theodore Lewis Mason died at his residence, in Brooklyn, N. Y., of pneumonia, Feb. 12th, 1882. Dr. Mason was born at Cooperstown, Otsego County, New York, September 30th, 1803. His father, Daniel Mason, a lawyer, was a lineal descendant of the famous John Mason, one of the founders of Norwich, Connecticut, and for years a member of the Council, the Lieutenant-Governor, and Commander-in-Chief of the military of the State. His mother was a daughter of the Rev. Dr. Lewis, of Greenwich, Connecticut. He graduated from the College of Physicians and Surgeons of New York in 1825. After practicing a while in Wilson, Conn., he moved to New York, and settled in Brooklyn, in 1834. Dr. Mason manifested great interest in the treatment of inebriety as a disease, and was President of the Inebriates' Home of Kings County, and later was President of the American Association for the Cure of Inebriates. He was a resident Fellow of the New York Academy of Medicine, a member of the Medical Society of the County of Kings, and was President in 1842 and 1843. He was a permanent member of the American Medical Association and of the Medical Society of the State of New York. He was one of the founders, life member, and Director of the Long Island Historical Society, a member of the American Colonization Society, and its Vice-President in 1874.

ROBERT BRIDGES, M.D.

Dr. Robert Bridges, Emeritus Professor of Chemistry in the Pennsylvania College of Pharmacy, died at his residence, No. 119 South Twentieth street, February 23d, 1882, in the seventy-sixth year of his age. Dr. Bridges was a native of this city, and a constant resident during all the years of his active and useful life. He graduated at the University of Pennsylvania, both in the department of arts and in that of medicine; the latter in 1828, six years after the establishment of the College of Pharmacy, an institution to which he was afterward to render services so valuable, faithful, and so long continued. His services were held in such high esteem by all associated with the College of Pharmacy that when increasing years and infirmities warned him to tender his resignation, he was at once elected Emeritus Professor of Chemistry, and so continued during the brief remainder of his life.

Dr. Bridges being a physician, as well as a chemist, was a fellow of the Philadelphia College of Physicians and Surgeons, and for many years, in addition to the duties of his professorship, discharged those of librarian to the last-named institution. He was a man of active mental constitution, a patient and systematic thinker, and a polished and lucid writer, and the scientific journals of the country were enriched by many contributions from his pen. He was also the American editor of *Fowne's Chemistry*, which, by its extensive circulation, made his reputation national.

For the last two years Dr. Bridges has been a

sufferer from a complication of diseases, which, as became plainly evident some weeks since, could have no other than a fatal termination. In private life Dr. Bridges was a gentleman of high intelligence and kindly manners, proceeding from genuine goodness of heart and innate benevolence. To his immediate relatives he was tenderly attached, and his house was as a home to those near and dear to him; but, singularly capable as he was of appreciating household happiness, he never married.

DR. SAMUEL WHITALL.

Dr. Samuel Whittall, one of the best known physicians practicing in New York city, died February 18th, 1882, at his home, No. 607 Lexington avenue. A week previous he was attacked by malarial fever and acute bronchitis. His death was sudden and altogether unexpected. He was but forty-one years old, and has generally enjoyed excellent health. Dr. Whittall was born in Woodbury, N. J., and was educated in the drug business in Philadelphia. He went to New York soon after his majority had been attained, having graduated in medicine. He was a member of the Pathological Society, and of the Physicians' Mutual Aid Association. For many years, and until the time of his death, he was Superintendent of the Colored Home Hospital, First avenue and Sixty-fifth street. During the latter years of his life he became a frequent contributor to medical journals, and his opinions were quoted as authority. He was prominent in the Orthodox Society of Friends, and was noted for his charities. He was a widower, and leaves no children.

—Victor Theodore Junod, the celebrated Swiss doctor and author of medical works, is dead. He was born in the Canton of Vaud, in 1804. When a young man he went to Paris and became known for his inventions of cupping glasses and therapeutical bell-glasses. He received the Montvon prize in 1836, and the grand prize of medicine and surgery in 1870, besides several medals at the London, Paris and New York exhibitions.

—Lucius L. Pettengill, the last surviving son of Samuel C. Pettengill, M.D., died at Hancock, Delaware County, New York, on the eighth day of February, 1882, in the fortieth year of his age.

QUERIES AND REPLIES.

A subscriber would like to know the medical properties of *Chionanthus Virginica* or old man's beard.

MARRIAGES.

CRESSWELL.—BOYD.—On Tuesday, February 7th, 1882, by Rev. J. Mateer, D.D., Dr. John Cresswell, New Bethlehem, Pa., and Miss Sadie M. Boyd, Rimersburg, Clarion Co., Pa.

DEATHS.

DIXON.—George B. Dixon, M.D., suddenly, on the 23d of February, at Pilatka, Florida.

NEWBERRY.—At Corralitos, Mexico, February, 11th, U. G. Newberry, M.D., eldest son of Prof. J. S. Newberry, of Columbia College.